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OF
THE PRESIDENT AND THE TREASURER
OF
HARVARD COLLEGE

1906–07

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PRESIDENT'S REPORT FOR 1906-07.

To the Board of Overseers: —

The President of the University has the honor to submit the following report for the academic year 1906-07, — namely, from September 27, 1906, to September 26, 1907.

At a special meeting of the Board of Overseers held on April 10, 1907, a vote was passed extending the right to vote for Overseers as follows: —

> *Voted*, That this Board hereby determines that the degrees conferred by the Governing Boards of the University, upon the recommendation of the Faculty of Arts and Sciences, upon the graduates of the Lawrence Scientific School, of the Graduate School of Arts and Sciences, and of the Graduate School of Applied Science, and the degree of Bachelor of Science conferred after residence in Harvard College, shall entitle the recipients thereof to vote for Overseers to the same extent and under the same restrictions to and under which recipients of the degree of Bachelor of Arts in said College may now so vote.

At a meeting of the President and Fellows on April 29, 1907, the same vote was adopted in concurrence with the Board of Overseers. This action was taken under an act of the Massachusetts Legislature approved March 27, 1902, which provided that the President and Fellows of Harvard College, and the Board of Overseers of said College, may determine from time to time by concurrent vote "whether any, and if any, what degrees issued by said College other than those mentioned in the first Section of Chapter 173 of the Acts of the year 1865 shall entitle the recipients thereof to vote for Overseers to the same extent and under the same restrictions to and under which recipients of the degree of Bachelor of Arts from said College may now so vote." The restrictions referred to exclude from the suffrage members of the Corporation and officers of government or instruction, and prevent Bachelors of Arts from voting before the fifth annual election after graduation. These restrictions, like the exclusion from the suffrage of graduates of the three oldest professional schools, were natural enough in 1865, but are quite inconsistent with the present organization and spirit of the University, and with the present feelings and modes of action in all Harvard Classes, Clubs, and Associations.

In April, 1906, a joint committee of the Corporation and Board of Overseers was appointed, consisting of the President of the University, three members of the Corporation, and three members of the Board of Overseers, "to consider what changes are desirable in the organization and administration of the University, and to report thereon in twelve months from this date, if practicable." This committee made report to both Boards in March, 1907. They found that an undoubted improvement had been effected, since the committee was appointed, by the institution of the Resident Executive Board, which deals with a large number of administrative details that had before been carried through the President to the Corporation. It was the opinion of the majority of the committee that the President of the University does not need to be relieved of any function that he now performs; but that he ought to be relieved of details in many directions, and to have more assistance than he now has. They recommended that the Secretary to the Corporation should have an assistant, who should be a graduate of the College. This recommendation was carried into effect in June, 1907, by the appointment of Mr. Joseph Warren, A.B. 1897, LL.B. 1900. They reported that the Faculty of Arts and Sciences transacts its executive business much more effectively than formerly, and more effectively than any other Faculty in the University; and they approved the way in which the Faculty does its executive work through Deans, administrative boards, divisions, departments, and committees. They recommended that the chairmen of large divisions or departments be provided with more clerical assistance. This recommendation has been carried into effect. They encouraged subordinate boards and committees and Deans to take final action on all questions for the determination of which sound precedents had been settled, or which could be acted on under standing rules of the Corporation or the Faculty, or, in other words, they recommended that administrative discretion should be freely used by trusted officials and committees. They observed "that the changes or other improvements which your committee suggest are all natural outgrowths of present practices, or developments of measures already initiated." Mr. Charles Francis Adams, a member of the committee from the Board of Overseers, assented to the conclusions of the majority, so far as they went; but intimated "that, in his judgment, far more comprehensive measures of reform would be desirable." Mr. James J. Storrow, another member on behalf of the Overseers, thought "that the changes recommended in the majority report are probably in the right direction; but that they still leave the administration of the University in a cumbersome and somewhat ineffective condition." The report will be found printed in full in the Appendix, p. 337.

During the summer of 1906 Harvard University was duly notified that the Executive Committee of the Carnegie Foundation had placed the University on the list of institutions entitled to share in the benefits of the Foundation; so that the Carnegie Retiring Allowances would become a part of the regular academic compensation of its Professors. This action on the part of the Carnegie Foundation was duly acknowledged by the President and Fellows of Harvard College on the 6th of October, 1906, and the benefits of the Foundation were gratefully accepted. These benefits are of two kinds, one kind taking effect upon professors and their families; the other on the institutions of the higher education themselves. Although the Carnegie Retiring Allowances have only been available for about a year and a half, they have already been received by several retiring professors in Harvard University, and by two widows of professors who have died in office; and in every case the pension was welcomed as a pecuniary recognition of long and faithful services. The Harvard system of retiring allowances made no provision for widows, and widows are not entitled by right to any pension under the Carnegie rules; but the practice has already been established of granting to a widow, in clear cases of need, one-half the pension to which her husband would have been entitled, this grant being made by a special vote of the Executive Committee. As a resource for a widow in cases of sudden disability or death, the possibility of a Carnegie pension is already a great comfort to men of small means who give their lives to the higher education. It does not relieve men who can get their lives insured from the duty of so doing; but there are some men with families who are unable to procure life insurance on any terms, and others whose income so little exceeds their necessary family expenses that they cannot pay the premiums on any adequate amount of insurance. The relief from the apprehension of premature disability or senility on the part of men who have adopted a calling which precludes the expectation of large earnings is also very great. The beneficent effects of the Carnegie Foundation on the institutions of higher education themselves are already plain. The Foundation makes possible the retirement in a considerate and satisfactory way of old teachers whose usefulness is impaired, and so keeps Faculties fresh and vigorous in their membership; and it attracts to college and university service capable young men who were formerly deterred by natural apprehensions concerning the means of properly supporting themselves and their families. Moreover, trustees need no longer be afraid to call to their service elderly men — men fifty years of age, for example. They used to feel that such a man could give them only ten or fifteen years of first-rate service, to be followed, in all probability, by a formidable number of years of impaired service. Since the Carnegie pensions, they need no longer apprehend the unprofitable appendix to the years of distinguished service. The Foundation, in its search for the means of executing the trust, is giving the country trustworthy means of discriminating between schools and colleges, and between colleges and universities. It is also contributing to raising the standard of admission to college and to mitigating denominationalism in education.

By the desire of Mrs. William Belden Noble, the founder of the William Belden Noble Lectures, the terms of that Foundation were reconsidered by the President and Fellows, and were adopted in a somewhat new form on November 26, 1906. The new terms will be found printed in full in the Appendix, p. 340. The chief change in the terms is the transfer to the President and Fellows of Harvard College of the appointment of lecturers on this Foundation. Heretofore the lecturers have been selected by a body of private persons and officials named by the founder, and called the Trustees. The Fund having been all the time in the charge of the President and Fellows, and the method of selection having proved somewhat cumbrous and uncertain, the founder desired to place the entire charge of the Foundation and its work in the hands of the President and Fellows. In recasting the original terms she proposed some other not material modifications and additions, to which the President and Fellows readily assented, being sincerely desirous to perfect this touching memorial of an unfinished life.

On the death of Professor Nathaniel Southgate Shaler in April, 1906, more than 760 alumni of Harvard University united in contributing a sum of $30,500 to establish the "Shaler Memorial Fund" in commemoration of his long service and of the great affection in which he was held by his many students and friends. The subscribers to this Fund left the designation of its uses to a committee consisting of Robert Winsor, William M. Davis, and Edward W. Atkinson; and on the 11th of March, 1907, the President and Fellows received from this committee a paper declaring the objects of the Fund as follows: First, to put up a memorial tablet in the Geological section of the University Museum, and secondly, to apply the income of the balance of the Fund to original researches and the publication of the results of research, under the direction, and for the benefit, of the Division of Geology. The subject and the field of research are to be approved by the Division Committee, and the persons to undertake researches are to be nominated by the same Committee. Any work or journey supported in whole or in part from the Fund is to be carried on under the name "Shaler Memorial Research" or "Shaler Memorial Expedition." The publications contemplated are to include the results of original research carried on with the income of the Fund, or independently of such aid, but in all cases must receive the approval of the Division Committee. Approved publications are to bear the general title, "Shaler Memorial Series." In accepting this gift, the President and Fellows recorded their satisfaction in the possession of such an enduring and fruitful memorial of Professor Shaler.

When the Medical School moved from its Boylston Street building to the new buildings on Longwood Avenue, James

Skillen, who had long been the janitor of the Medical School, retired from the service of the School. He was in the service of the Massachusetts General Hospital from 1864 to 1877, and in that of the Medical School from 1877 to 1906. During these 42 years of continuous faithful duty in closely allied institutions, he made many friends among physicians, medical students, and patients, and these friends determined that some comfortable provision should be made for his declining years. On the 15th of January, 1907, a committee formed to secure an annuity for James Skillen and for Susan Skillen, his wife, forwarded to the Treasurer of the College $10,000 wherewith to establish the James Skillen Memorial Fund. It was understood that James Skillen is to receive an annuity of $800 during his life, that, in case of his death, Susan Skillen is to receive an annuity of $400 during the remainder of her life, and that on the death of both annuitants, the Fund is to become one of the permanent endowments of the Harvard Medical School. It was further understood that the capital of the Fund is not to be impaired, the Medical School paying any excess of the annuity above the income of the Fund. The President and Fellows voted to establish the James Skillen Memorial Fund on the above terms, and gave to the committee and the donors the thanks of the President and Fellows for their ultimate benefaction to the Medical School.

When the Executive Committee of the Alumni Association established offices at 50 State Street, Boston, and appointed Mr. Edgar H. Wells General Secretary, the President and Fellows coöperated with the Association by retaining Mr. Wells in the service of the University as a member of the Faculty and as Secretary for Appointments, by appointing him editor of the Quinquennial Catalogue, and by giving into his charge the preparation of a comprehensive address-list of all living former students of the University. Mr. Wells entered upon his duties on the 1st of May, 1907. For the preparation of the Quinquennial Catalogue he is to have the help, if he wishes it, of two persons, both of whom are to be paid by the University. The Alumni Association is to pay for the preparation of the new address-list of living men who have studied at Harvard University; but the University is to contribute $780 a year towards this cost. As

Secretary for Appointments, Mr. Wells is to be paid by the University, and the members of the office-force for Appointments are also to be paid by the University. Mr. Wells retains his former office in University Hall, and uses also the Alumni office at 50 State Street, Boston.

The office of the Association in Boston will become a repository of information about the University, and about the Alumni, and will promote the formation of new Harvard Clubs and the activity of the established Harvard Clubs in all parts of the country. The Secretaries of College Classes, the Alumni Associations of the Professional Schools, and all Harvard Clubs are requested to contribute to the work of preparing the new address-list, which will include a geographical classification of the names and addresses, so that it will be easy to find the Harvard men in any town, city, or state. The Alumni Association has taken control of the Harvard Bulletin, which will be its official organ; and the permanent maintenance of the General Secretary's office, and of all its work, will depend on the profits accruing from the publication of the Bulletin. The Boston office is intended as headquarters for Harvard men in Boston, whether residents or visitors. The Secretary is at the service of the Alumni, and he will be dependent for the success of his work upon their coöperation.

It is obvious that the different parts of Mr. Wells's work may be made to help each other. Thus, the Appointments Office should be greatly helped by the new resources of the General Secretary of the Alumni Association; for the Appointments Office not only secures suitable positions for undergraduates and past members of the University who are seeking employment, but also responds to calls made upon it to supply the best available Harvard candidates for vacant positions. The service is not limited in its application to the students of any one department of the University, or to any one class of occupations. With the steady help of the Alumni, and of all departments of the University, the work of the Appointments Office might be greatly extended. In time the office will supply the best demonstration of the value of a college education towards the winning of a livelihood. It will prove that the educated young man of fair capacity, from the moment he begins to earn his livelihood, gets on faster than the uneducated young man, and goes farther. It is also a fact, though the Appointments Office cannot prove it, that the educated young man gets more enjoyment and durable satisfaction out of life than the uneducated, provided only that he keep his health.

The report of the Secretary for Appointments (p. 343) will be interesting to the Governing Boards of the University and to all its alumni and friends; for it indicates very plainly the increasing influence of the University, first, on the profession of teaching, and secondly, on the conduct of large businesses and of the great industries. It also shows what a large proportion of the total number of students in the University are dependent either in whole or in part on opportunities to earn their living while they are pursuing their studies. For such persons the Appointments Office found no fewer than 1452 jobs during the year 1906–07. Of the temporary jobs procured in great variety, it will be noticed that fewer than one-third have anything to do with teaching, or literary or scientific work. The great majority of the employments are engaged in merely for the sake of the wages, or pay. It is a good sign that students can make themselves useful in such a variety of ways, while they are giving a large portion of their time, either by day or by night, to study. The number of permanent positions filled is also large, and the sum of the annual salaries received by the 599 persons placed was more than $450,000. Tutoring appears to be the most profitable occupation which a young graduate can take up immediately on graduating. The service of secondary schools yields for recent graduates the next best immediate return; while business, and the service of universities, colleges, and technical schools are about equally advantageous for the young newcomer.

The services of the Appointments Office are rendered gratuitously, no charge being made either to the employer or the employed. A branch office was opened last spring at 50 State Street, Boston, in the offices of the Alumni Association, where the Secretary will be in close communication with Harvard Clubs, and the Officers of the Classes, and with Alumni, who, as administrators, educational or other, officers of corporations, or members of partnerships, need the services of educated young men.

Some new forms of scholarships were created during the year under review, — forms which may have an interest for persons who are contemplating the creation of scholarships in any endowed institution of the higher education. Thus, four scholarships, two with an income of $200 each and two with an income of $150 each, bearing the name of Edwin Erwin Coolidge of Natick, Massachusetts, a member of the Class of 1901, were established to be administered as *loans*, the loans to become due five years after the cessation of the incumbents' connection with Harvard University as students. In the assignment of these scholarships, preference is to be given, first, to the descendants of John Coolidge who settled in Watertown, Massachusetts, about 1630, and secondly, to residents of Natick. Subject to these preferences in the assignment, these scholarships are intended to confer an academic distinction like that attaching to other scholarships; but it is the desire of the founders that "in estimating the worth of a candidate for one of these scholarships, weight shall be given not only to his mental and moral qualities, but also to his bodily health and vigor, especially as shown by proficiency in outdoor sports."

An anonymous giver established a fund of $5000 in memory of Jonathan Fay, who was born at Westborough in 1754, entered Harvard College in 1774, accompanied the College to Concord when the American troops occupied the College buildings in Cambridge during the siege of Boston, there met Lucy Prescott — born in 1757 — and married her in 1776, while he was still a student, and in memory also of their son, Samuel Phillips Prescott Fay, who was born in 1778, the year in which his father graduated from Harvard College. Jonathan Fay settled in Concord and became a lawyer and a representative in the General Court. The son settled in Cambridge as a lawyer, was Overseer of Harvard College from 1824 to 1852, and Judge of Probate for the County, and lived long in the house, still called the Fay House, making part of Radcliffe College on the corner of Garden and Mason Streets. The Fund now established by an anonymous donor recalls the memory of these honored members of the legal profession, long since dead. The income of the Fund is to be applied first,

> "... to the expense of preparing and issuing a diploma in such form as you [The President and Fellows of Harvard College] may determine, provided that it shall appear therein that it is issued for high scholarship,

and in memory of Jonathan and Samuel Phillips Prescott Fay. This diploma is to be given to the member of each graduating class of the Law School who, in the judgment of the Faculty of that School, has, during his three years' course, shown the greatest ability. The balance of the income in each year is to be paid at the close of the school-year to such student in the Law School as the Faculty of that School consider most worthy of assistance, provided he has finished at least one full year's course, and they are satisfied of his intention to complete the three-year course; but this provision shall not prevent this payment being made to a third-year student if deemed worthy as aforesaid. . . . To be eligible to receive a diploma or payment, both father and mother of the student must have been born citizens of the United States of America. If at any time women are admitted as regular students in the Law School, they are to have the same rights as men hereunder."

In the will of John Bartlett, of Cambridge, the author of "Familiar Quotations" and of the great Shakespere Concordance, the following section occurred,

> "On my dear wife's decease, it is my will that the sum of ten thousand ($10,000) dollars shall be paid in her name to the Corporation of Harvard University to endow a Willard Scholarship in memory of Samuel Willard, Vice-President of said University, her ancestor, and of Joseph Willard, President, her grandfather, and of all his descendants, graduates of Harvard";

whereupon the Corporation

> "Voted to establish the Willard Scholarship in the Graduate School of Arts and Sciences with a stipend of $450 upon the foundation bequeathed by John Bartlett, Esq., late of Cambridge, deceased, the scholarship to be assigned each year to a person who has attained an established position as a teacher in a college or secondary school, or as a superintendent of schools, and intends to return to educational service after his residence in the University — preference to be given to teachers of literature and to graduates of Harvard College."

Samuel Willard was Vice-President from 1700 to 1707, and Joseph Willard was President from 1781 to 1804. Samuel Willard graduated in the Class of 1659, and died 200 years ago. Joseph Willard was a member of the Class of 1765, and died more than a hundred years ago. This Samuel Willard was the first of six Samuel Willards to graduate at Harvard College, and this Joseph was the first of six Joseph Willards to graduate at Harvard College. The act of John Bartlett revives the memory of these two faithful servants of Harvard College, and will transmit their names to many generations through the beneficiaries of the Willard Scholarship he has founded.

By the will of Miss Priscilla Clark Hodges the President and Fellows received $4000 to establish a scholarship to bear her name, without any designation of the department in which the scholarship should be used, or of the subject to the promotion of which it should be devoted. The Corporation assigned it to the Graduate School of Applied Science.

By vote of the Corporation passed May 13, 1907, the President and Fellows established in Harvard College six scholarships of $150 each, from the income of the Daniel A. Buckley Fund. The real estate in which this Fund was invested, situated in Cambridgeport, needed when it came into possession of the Corporation considerable expenditure for repairs and improvements. These changes having been made, and the buildings being occupied by responsible tenants, the Corporation decided to give effect to the late Daniel A. Buckley's benevolent intentions towards needy students who enter Harvard College from public or non-sectarian schools in Cambridge. It was the intention and desire of the testator "to promote as much as I can education within the limits of said city of Cambridge, and for this purpose to furnish as far as possible from my said estate . . . without regard to sex, race, creed, or color, further education in Harvard University to such graduates of the schools before named, who may earnestly desire such education, and whose circumstances and condition in life would otherwise prevent them from acquiring." It will be observed that these scholarships are for the benefit exclusively of graduates from Cambridge schools.

It is well that scholarships continue to be endowed in the University, for they make it possible for many deserving young men to come to Harvard University who, without such aid, might fail to obtain a thorough education, or find themselves obliged to go to other universities where no tuition-fee is charged. Inasmuch as most of the scholarships have a stipend higher than the tuition-fee, a balance remains applicable to the incumbent's personal expenses; so that he is better off than he would be at a free-tuition institution. Since all scholarship-holders at Harvard pay tuition-fees, the greater part of the income of scholar ship funds supports instruction.

The endowed institutions of the higher education must look forward to formidable competition with a large number of strong State universities in which tuition is free. They may find encouragement in the fact that the endowment of a scholarship has proved to be an attractive form of educational endowment. It does not require a large sum of money, $6000 being an adequate fund for a single scholarship, and it does offer to the giver the pleasing prospect that his gift will continue through centuries to contribute to the prolonged and thorough education of deserving young men who, without his aid, could hardly have attained that high privilege.

In the figures of the following table, the holders of honorary scholarships, that is, of scholarships without stipend, are included:

	Scholarships of the First Group.	Scholarships of the Second Group.
From Public Schools	40	89
" Endowed "	5	44
" Private "	3	18
Total	48	151

In the first group there were seven John Harvard (honorary) Scholarships out of the total number 48; in the second group there were 81 Harvard College (honorary) Scholarships out of the total number 151.

The honorary scholarship holders are one-seventh of the first group, but more than half of the second; so that it is by no means true that the high scholars in Harvard College are all poor men. It is true, however, that the public schools deliver to Harvard College a large majority of the men who, during their college life, attain high standing as scholars. Out of 199 scholarship holders for the year 1906–07, 129 were prepared in the public schools. In all probability the boys who come from the public schools have a more vivid sense than the others that they must acquire in college the capacity to earn a good living in some intellectual calling.

The list of those candidates for the degree of Bachelor of Arts or of Bachelor of Science who were entitled to Commencement Parts, under either the old rules or the new rules, or under both, illustrates the same fact with regard to boys coming from the three classes of schools above mentioned. From the public schools came 75 of these good scholars; from the endowed schools, 25; and from the private schools, 12; or, in other words, the public schools supplied twice as many recipients of this distinction as the endowed and private schools put together.

The work done by the Committee on Admission during the past two years showed its good results in the Admission examinations of 1907. The Committee dealt in 1906–07 with 1070 applications for admission, rejected 165, held over until September the cases of 159 applicants of whom 51 appeared in June but not in September, and admitted 854 persons to Harvard College, including 180 admitted as Special Students. The Committee also dealt with 928 applications for preliminary examinations. The total number of applicants for both final and preliminary examinations was larger than in the previous year; but the chief gain was from Massachusetts. The South Atlantic and South Central divisions of the country showed slight losses. All other divisions showed gains. The College and the Scientific School (now united in a single undergraduate department) have always drawn their students from a number of schools large in proportion to the number admitted each year. Thus in 1906, 220 schools supplied the final candidates for admission; in 1907, 223 schools. Among these schools, however, only 112 were represented in the final examinations of both 1906 and 1907. The schools from which the College and the Scientific School receive students every year number fewer than 40. Before 1906, the year in which young men were first admitted to Harvard College as candidates for the degree of S.B., the percentage of candidates from high schools had been diminishing; but both last year and this year the percentage of candidates from public schools has risen, until last summer it reached 43.3 per cent. This is the highest percentage from public schools for many years. Undoubtedly the percentage of candidates from public schools would be still further raised, if all the subjects which candidates for the degree of S.B. may present for admission to Harvard College were also recognized as admission subjects for the degree of A.B. It is a curious fact that botany, zoölogy, civil government, economics, and freehand drawing, all of which are recognized in College as suitable subjects to count for the degree of A.B., are recognized as suitable subjects of study at school only for candidates for the degree of S.B. This discrimination is not against the subjects as culture subjects, but against the secondary schools as places to teach those subjects except to boys whose education is to cease at eighteen, or whose education is to be continued in scientific schools. Inasmuch as the elements of these subjects are obviously suitable for boys of from fourteen to eighteen years of age — if not younger — this unnecessary breach between the public schools of the country and Harvard College is much to be regretted.

Under the wise guidance of the Committee on Admission the number of final candidates who made use of the examinations of the College Entrance Examination Board trebled between 1906 and 1907, and the number of preliminary candidates doubled. Moreover, by means of these Board examinations the College was brought into connection with 21 schools new to our list, 19 of which are outside of New England.

The report of the Committee on Admission (p. 349) calls attention to the fact that nearly 26 per cent., namely, 203 persons, of the 798 candidates for admission at the final examinations took more than the required number of examinations. These candidates presenting extra subjects represented 79 schools, which were divided as follows: public schools, 40; private schools, 23; endowed schools, 16. The examination records of these young men were generally good. These facts do not bear out the contention of some schoolmasters that colleges in general require more work for admission than can be done well at school. Harvard College requires for admission more than any other college in the country, and yet a quarter part of all the candidates for admission by examination present extra work, and give evidence that they have done their work well. The difficulties of which some schools complain are not caused by the amount of work asked for by the colleges, but by lack of proper adjustment between the college tests and the school programmes, and by the distractions of contemporary school life, the reduced number of school hours per week, and the exaggerated sports and vacations.

There is some difference of opinion between the Committee on Admission and the Dean of Harvard College concerning the new rule which the Faculty adopted May 7, 1907, on recommendation of the Committee, as follows: "That hereafter no extra admission subject be counted as a course or half-course towards a degree unless offered in advance as the equivalent of college work, and unless the examination book has been read with that end in view, and marked not lower than C." The Committee contends that by using the admission examinations for extra subjects studied at school, the candidate for admission can advance himself towards his degree with lower grades than would be allowed to count if he studied the same subjects in Harvard College, and they would therefore insist on the attainment of a higher standard at the examination on extra subjects that are to be counted towards a degree. The Dean of Harvard College, on the other hand, sees in this new regulation (p. 105) a discouragement of attempting extra work at schools, and an attack upon the three-year degree. Since the number of men who take the degree of A.B. or S.B. in three years, or three and a half years, is steadily increasing, the Dean fears that the new regulation will compel more of this large class to elect five and a half or six courses in a year. Anticipating subjects in college by means of good school work reduces the number of persons who, while in college, feel compelled to take more than five courses in a year. Inasmuch as the new rule was to be applied first to the class which enters college in 1908, no actual experience of the working of the rule has yet been obtained.

The number of candidates who present the new advanced subjects in the June examinations continues to be small — for example, two presented counterpoint, five physics, and seven astronomy, against 440 that offered advanced French and 426 that offered advanced Latin.

The Committee on Admission states strongly the objections to the ancient practice of admitting young men to college on condition that they make up certain subjects in which they appear to be deficient. Such young men must either continue, by the side of their college work, the school subjects in which they have failed, and pass the admission examinations in those subjects at some later opportunity or they must take a college course in the subjects in which they have failed at the admission examinations. Both of these methods injure college work; the first by compelling the student to take time from his college work in order to make up unsuccessful school work; the other by compelling the college to maintain elementary courses not far removed from the school courses in the same subjects.

The Committee on Admission is much impressed with the local character of the Harvard admission requirements by examination. It conceives that the rapid growth of the country and the rise of many other colleges necessitate corresponding changes in the Harvard regulations concerning admission, if close connection is to be maintained between the College and the public schools. Once the College could prescribe the programmes of neighboring high schools; but now the programmes of secondary schools, whether near-by or distant, are rightly settled by the needs of the communities in which the schools are situated. The existing scheme of admission requirements assumes that the College is closely related to the schools from which it derives its students, and is proposing to continue for almost all its students instruction in the subjects treated in those schools. This close relationship no longer exists; and a large proportion of the students admitted to Harvard College to-day enter immediately upon the study of subjects new to them. Harvard College needs a scheme of admission requirements so broad and flexible that it will serve as a means of selecting for the College capable boys from all parts of the country. This scheme must recognize a great variety of school programmes, and must not attempt to compel the use of any particular method of teaching any subject in secondary schools. The present rules permit a division of subjects and of examinations between two years or more, and this permitted division is the way of escape from the considerable difficulty of passing simultaneously ten examinations in eight subjects. This way of escape, however, assumes that a student decides to come to Harvard College two, or even three, years in advance. This assumption is not a safe one. Families at a distance, or even near at hand, are often unable to make this decision so far in advance; and there are many young men who come near to the end of their school course before they feel a strong desire to continue their studies. For distant families and pupils the present scheme of admission to Harvard College is not favorable. The examination for admission to Harvard College, whether as a candidate for the A.B. or for the S.B., should, therefore, be made a convenient one for boys who take the complete examination n one year. The difficulty could be diminished by setting for candidates who attempt to pass the whole admission examination in one year, a single examination in those subjects in which there are now two. The English Department has already tried this method and found it to work well. Any candidate for admission may take the examination in English *A* (the higher of two examinations), and thereby satisfy the requirement for admission, and also anticipate English *A* of the Freshman year. This arrangement has the advantage of permitting pupils and teachers in the secondary schools to work with greater freedom within a larger requirement than that of Elementary English. It is not impossible to make a similar arrangement with respect to the other languages and to history and algebra.

Another difficulty with regard to Harvard admission examinations is that the question-papers are prepared each by some special Department interested in the teaching of one subject, and every Department has a theory as to what school preparation in its own subject should be. The men within the Department to whom is assigned the duty of preparing question-papers and reading examination books are seldom in position to know much about secondary schools, except those in the immediate vicinity of the College. It happens, therefore, that when a young man applies for admission from a school which has had no connection with Harvard, he is subjected to tests based upon school courses different from those he has followed; and he may fail for that reason, although he has done good work at school, and is fully capable of pursuing the College work. In short, the scheme of admission requirements for Harvard College ought to be based upon generally accepted school courses, and not upon the programmes of a few neighboring schools; otherwise the College will be cut off from a large body of students who have done good work at school, and are perfectly capable of doing good college work. A recent inquiry into the working of the requirement in Elementary Latin well illustrates these principles. The Harvard requirement called for some knowledge of Latin Poetry at the end of the third year of a school course. Two investigations on this subject were lately made, one by the Committee on Admission, and the other by an Overseers' Committee, and the results of both investigations were the same. They both showed that in the majority of schools, it was impossible for a boy to get instruction within the regular programme which enabled him to take the Harvard examination in Elementary Latin if he divided the admission examination. Out of 86 schools which had within the last ten years sent boys to Harvard, only 22 found no difficulty with the present requirement in Elementary Latin, and of these 22 schools, 19 were in Massachusetts, and only one was outside of New England. Sixty-four schools replied that they were unable to adjust their programmes to the Harvard requirement. Among the schools in the North Central Association of Colleges and Secondary Schools, 57 replied that they gave instruction in Latin Poetry before the last school year, and 147 replied that they did not give instruction in Latin Poetry until the last year. As a result of these inquiries, the Faculty, on recommendation of the Department of the Classics, has during the current year changed the definition of Elementary Latin. For four years this single Department of the Classics has seriously checked resort to the University by setting examinations at variance with the programmes of most American secondary schools. The lesson to be derived from this experience is that all the definitions of admission requirements should be carefully compared with school programmes and with the definitions of examination subjects at other colleges, and that all non-essential diversities, whose only effect is to obstruct access to Harvard College, or interfere with the liberty of schools in preparing boys for college work, should be done away with.

The Committee on Admission has excellent opportunities for studying the uncertainties of admission examinations. Thus, for example, they can compare the records at the Harvard and the Board examinations of some boys who take both. Some boys fail in the Harvard examinations, but are passed by both Harvard and Board examiners in the Board examinations; others fail in the Board examinations, but pass the Harvard examinations; others pass both sets of examinations with striking differences in grades. These examinations are taken in successive weeks. The provisions made for the admission of Special Students afford some means of alleviating the consequences of unsatisfactory examinations. During the years 1902, 1903, and 1904, the Committee on Special Students admitted as Special Students 67 men who had been rejected by the then existing Committee on Admission Examinations. Of these 67, only 19 failed to justify the action of the Committee. In 1906, the new Committee on Admission admitted 66 men as Special Students who had failed to obtain examination records which would admit them to the Freshman Class. The considerations which induced the Committee to admit these men were their ages, their school records, the recommendations of their teachers, and their characters and purposes as described by their teachers and manifested in personal interviews with members of the Committee. Of these 66, only 7 failed in what was really their Freshman year. More than half of them, having made up their admission deficiencies, returned this year as Sophomores.

The Harvard admission requirements assign to Greek a larger value than is assigned to other subjects which ordinarily occupy the same time in school programmes. One effect of this policy is to admit to College boys who present Greek, with one subject fewer than they would have to offer without Greek. This artificial stimulation of the study of Greek does not appear to be successful, unless perhaps in retarding the decline of the study. The selection of Greek in the June examinations for the last five years has been as follows:—

	1903.	1904.	1905.	1906.	1907.
Elementary Greek . . .	141	121	105	95	82
Advanced Greek	276	264	249	226	196

Other subjects are assigned disproportionately low values, and in consequence are not well provided for in the schools, or are studied there with less vigor than is desirable. Thus, botany, zoölogy, civil government, economics, and freehand drawing can each be counted for only one point, and can be offered only by candidates for the S.B.

School work and college work overlap each other to an undesirable extent, partly in consequence of the College policy of admitting applicants on condition that they make up certain defects in their preparation. The new Committee on Admission has increased sensibly the percentage of Freshmen admitted "clear" (without conditions); but still about 55 per cent. of those admitted to the Freshman Class in 1907 were admitted with "conditions." In other words, more than half the Freshman Class still have some school work to do while they carry on their College work, or must take in College courses which are in large part repetitions of instruction provided in their schools.

There is no subject more worthy of the immediate attention of the Faculty and of the Governing Boards than the requirements for admission to Harvard College, which has become the only undergraduate department of the University; for on those requirements depend the future relations of Harvard University to the secondary schools of the country — public, private, and endowed. The new Committee on Admission has acquired much information on the subject, has already introduced important improvements, and is entitled to have its future recommendations treated with great respect. The usefulness of three measures seems to have been already demonstrated: — (1) Establishing a practical identity of the Harvard requirements with those of the Board of College Entrance Examinations, with the view of gradually withdrawing the Harvard June examinations; (2) re-adjusting the ratings of the languages at the admission examinations; (3) recognizing as admission subjects for candidates for the A.B. all subjects taught in both school and college that may be counted in College towards the A.B. The object should be to enable capable boys to enter Harvard College with credit from any one of the hundreds of good secondary schools which towns and cities or private resources have built up in the United States and Canada.

During the year 1906–07 the votes of the Corporation establishing a $5 fee for the final admission examination to Harvard College and the Lawrence Scientific School, in addition to the $5 fee for a preliminary examination, took full effect. The fee of $3 charged for an examination to make up a condition at entrance, for an examination to make up an omitted examination in College, and for an examination in anticipation of a subject of College instruction, yielded more than in the preceding year. The result was that the receipts defrayed all the expenses of the admission examinations, of the examinations to make up omitted College examinations and conditions received at the admission examinations, and of anticipatory examinations. These various examinations were formerly a considerable charge upon the College; but their cost to the College is now a little more than covered by the fees collected.

At the instance of the Board of Overseers, the Faculty of Arts and Sciences made through its Committee on Instruction a re-examination of the entire list of courses of instruction offered by the Faculty, and considered the list of courses offered by each Department with the intent to increase its educational efficiency, and if practicable to diminish its cost. The Committee inevitably reported to the Faculty that there is only one way to reduce the number of courses offered, and thereby save annual expenditure, namely, to reduce the number of teachers, — either the permanent teachers, or the annually appointed, or both. With reductions of the teaching force the Faculty of Arts and Sciences has, heretofore, had nothing to do. There have been no additions to the teaching staff of late years, except a small number of appointments for which all the annual charges were provided by gifts or bequests. Assuming that the teaching force is to remain what it is, the Committee examined every elective course about the value of which there was any doubt. They detected "few courses, if any, which the Departments offering them cannot ably defend." They expressed the opinion that "from a catholic point of view what we need is not fewer teachers, but more, — teachers to fill gaps which a study of the elective pamphlet reveals; . . . so difficult is it for a university to meet the complicated demands of modern intellectual life." The remarks of the Dean of the Faculty on this subject (p. 99) will be found interesting. Unfortunately, the financial condition of this department of the University during the past few years has obliged the Corporation to reduce the number of professors in the Faculty of Arts and Sciences, as opportunity has offered.

The Faculty entered on a new undertaking in the year 1906–07, an undertaking capable of a large development. They offered nineteen courses for teachers, to be given in the afternoons and on Saturdays, the subjects of which included education, fine arts, German, American history, Latin, mathematics, music, ethics, physical education, physics, architecture, French, public Speaking, and Russian Literature. These courses were open to women as well as men, and the fee for each course was $15. This is another effort on the part of the University to be serviceable to teachers in schools situated within easy reach of Cambridge. Of the courses offered, eleven were given, which were attended by 60 men and 96 women. Similar courses are being given during the current academic year. The Faculty authorized the granting of certificates, on the recommendation of the instructors, to those students in these courses who did the required work, and passed satisfactorily a final examination. Like the summer courses, they suggest strongly that the University ought to encourage young teachers already in service to pursue their studies in a systematic way during several years, and to this end allow them to look forward to the attainment of a degree.

The Boston School Committee has encouraged teachers in the Boston schools to do work of this sort, especially by offering them a "sabbatical" year under favorable conditions. The increasing use of the summer vacation for purposes of study, both by teachers and by university students, points in the same direction; and the example of the University of Chicago, whose best quarter is the summer quarter, invites imitation.

The Visiting Professor from Germany, in the year under review, was Eugen Kühnemann, of the University of Breslau. He gave two half-courses conducted in German, the first on "German Literature in the 18th Century," and the second on the "German Drama of To-day." He also offered a seminary course during the first half-year on Schiller's Wallenstein, and gave public lectures on the "Young Goethe," and "Goethe's Faust." He took part also in appropriate conferences and meetings of students' societies, entering heartily into the literary and scholarly interests of the College. His four months' visit to Cambridge was of great advantage to the German Department; and for all Departments he set a high standard of performance to lecturers on literature.

The exchange of professors with Germany has thus far been highly satisfactory to Harvard University. The third exchange is now in progress, and is clearly giving great satisfaction. It is a unique experiment, all other Harvard exchanges with foreign universities being conducted on quite other plans.

In the spring of 1907, two eminent Englishmen and a distinguished Russian scholar resident in England were lecturing simultaneously at Harvard University. Mr. Gilbert Murray, formerly Professor of Greek at Glasgow, gave a course of six lectures on Greek Traditional Poetry; Major Leonard Darwin, of London, gave four lectures on Municipal Ownership; and Dr. Paul Vinogradoff, Professor of Law at the University of Oxford, delivered at the Law School a course of six lectures on the Elements of Ancient Law. Occasional courses of lectures from such scholars and experts as these contribute very much to the interest of academic life in Cambridge.

Two comparatively young Professors were appointed Deans of Departments during the year — Professor Wallace Clement Sabine, to be Dean of the Lawrence Scientific School, succeeding the late Professor Nathaniel Southgate Shaler, and Professor William Wallace Fenn, to be Dean of the Divinity School, succeeding Professor Francis G. Peabody, who resigned the Deanship after two years of service as acting Dean during the term of Professor Charles Carroll Everett, and five years of service as Dean.

The Dean of Harvard College reports (p. 101) the first effect on registration in Harvard College of the transfer to Harvard College of a large part of the candidates for the degree of Bachelor of Science, formerly registered in the Lawrence Scientific School, and also the first giving of the newly established degree of Bachelor of Science in Harvard College. He also points out that the Senior Class increased in the year 1906–07, returning to about the number of the year 1903–04; but that it has again dropped during the current year to a number decidedly below that of 1903–04. He attributes the fluctuations in part to the absorption by the College of the undergraduate portion of the Lawrence Scientific School. It is the opinion of the Dean that the three-year degree is "gradually but steadily becoming the normal type."

The Dean points out that the decrease in the number of the Senior Class, which has been decided in most years since 1900–01 and yet not steady, appears again in 1907–08, in which year the Senior Class numbers 292. Of this number, 17 had completed the requirements for their degrees in June, 1907, and 131 others could have so arranged their work as to complete the requirements in the middle of the present year. In other words, more than half the present Senior Class are staying in Harvard College longer than they need to in order to get their degrees. There can be no doubt whatever that any student of fair ability, who will work during at least half of two summer vacations, can get the degree of A.B. or S.B. in three years, or three and a half years, and do his work thoroughly well. The average student, as well as the good student, should therefore invariably aim to take his first degree in less than four years, and should then hasten into his professional school, or into direct work towards a livelihood and a useful and interesting career. This is clearly the way to get the most vigorous training, and also to advance most rapidly towards professional success and family life.

The Dean's report dwells on a long-standing evil which impairs the discipline of Harvard College, namely, the tardiness of many teachers in returning grades at the times appointed by the Faculty, not only the grades obtained at the hourly examinations and the mid-year examinations, but even those obtained at the final examinations in June. These delays, for which students as well as teachers are responsible, prevent the Dean's office from making prompt report concerning students' failures to parents and guardians, and to the Faculty and the Administrative Boards which often need to deal in some corrective way with the students who have failed in their examinations. This difficulty has increased in recent years with the increased number of teachers, and the increasing proportion of teachers who are not members of the Faculty. Both the Faculty and the Corporation have considered this subject during the current year with the intent to discover and apply a remedy.

The report of the Dean of the Scientific School describes in full the manner in which the plan for reorganizing the University's work for Applied Science, adopted in March, 1906, was carried out during the year 1906–07. This plan proposed the establishment of a graduate school of applied science, the transfer to Harvard College of the preparation of candidates for the degree of Bachelor of Science, and the maintenance of the former four-year programmes of study in the Lawrence Scientific School, so long as there should be students who wished to follow these programmes. It was part of the plan that the Graduate School of Applied Science should be open to graduates of all good colleges and scientific schools, just as the Graduate School of Arts and Sciences is, and accordingly the numerous courses of study in the Graduate School of Applied Science were not to be based exclusively on the Harvard qualifications for the degree of A.B. or S.B. At the time of the adoption of this plan, no one felt able to predict how the 504 students then in the Lawrence Scientific School would distribute themselves under the new scheme, or what effect would be produced on the total number of undergraduates in Harvard College and the Scientific School taken together. The report of the Dean, page 111, sets forth what actually happened in the first year of the operation of the new plan.

It appears, in the first place, that 204 students continued to follow the old four-year programmes; but that the programme called General Science almost disappeared, 13 graduating, 23 being transferred to the College, and 21 leaving the University. Only 6 remained in the General Science programme. Since only 9 students remained in the programme called Anatomy and Physiology, a programme introductory to medical study, the Corporation early in the year, on recommendation of the Faculty, voted to withdraw the programmes in General Science and in Anatomy and Physiology, except for students already registered in them. All Special Students in the Scientific School were transferred to the College. Seventy-two students transferred themselves from the Scientific School to the College as candidates for the degree of S.B.; 32 students, who were in the Scientific School during 1905–06, were transferred to Harvard College as candidates for the degree of A.B., having passed the examination in Elementary Latin at the time of their admission to the Lawrence Scientific School. The Dean prints an interesting table, page 112, which accounts for all the 504 students who were members of the Lawrence Scientific School in the year 1905–06. At the opening of the year 1906–07 there were in Harvard College 47 new candidates for the S.B. degree. Finally, for the first time in four years, the combined undergraduate departments (College and Scientific School) showed a gain in the number of students. It appears, therefore, that there was no net loss of students in the University in consequence of the reorganization of the instruction in applied science, but, on the contrary, some immediate gain. For the future, the chances are all in favor of improvement in the quality of students of applied science, and of increase in their number. The terms of admission to Harvard College are sure to be widened and improved by the advent of hundreds of students who are seeking the degree of Bachelor of Science. The College will be brought into useful connection with a large number of secondary schools which can prepare boys well for the courses which lead to the degree of S.B. in Harvard College. The Graduate School of Applied Science will be resorted to by graduates of other colleges and scientific schools, for the reason that Harvard University is already admirably equipped for giving advanced instruction in mining and metallurgy, architecture, landscape architecture, forestry, chemistry, geology, and biology, and is sure to be completely equipped within two or three years for teaching all branches of engineering. Already, in all these branches of applied science, graduation at Harvard University secures to competent and faithful young men prompt access to good professional employment. It is believed that the degree of Master offered by the Graduate School of Applied Science, as, for instance, Master in Electrical Engineering, or Master in Architecture, or Master in Forestry, will prove to be acceptable and significant.

On the 11th of March, 1907, the Special Joint Committee of the two Governing Boards on the Regulation of Athletic Sports, which had been in existence for some months, presented to the President and Fellows a report containing in substance the following recommendations: —

(*a*) That hereafter the Dean of the Faculty of Arts and Sciences, the Dean of Harvard College, and the Dean of the Lawrence Scientific School be the Faculty members of the Committee on the Regulation of Athletic Sports.

(*b*) That certain changes be made in the mode of electing the three undergraduate members of the Committee.

(*c*) That the Committee be recommended to secure the services of some man, who can give his entire time to the work, to act as graduate manager and the administrative officer of the Committee.

(*d*) That the expenses connected with athletic contests be reduced by diminishing the cost of training tables, and reducing the number, distance, and duration of trips of athletic teams away from Cambridge.

(*e*) That the number of intercollegiate contests be reduced.

(*f*) That the Athletic Committee use every effort to get concerted action with other colleges to abolish professional coaches.

(*g*) "That the Athletic Committee be instructed to apply the entire surplus of athletic receipts over the sums needed for current athletic expenses to the extinguishment of the debt on the Stadium until that debt is paid, and then to reduce gate receipts in such manner as it shall decide, so that there shall only be sufficient surplus each year for the gradual development of the athletic buildings and grounds of the University."

Whereupon, the President and Fellows voted that the report of the Special Joint Committee be accepted as a whole, and that the Committee be discharged. They also rescinded the vote of October 15, 1888, constituting a Committee for the Regulation of Athletic Sports, and instead thereof passed another vote constituting the Committee in accordance with the recommendations of the Special Joint Committee.

The exaggeration of athletic sports in schools and colleges remains a crying evil, and there are no clear signs that any effectual remedy is taking effect. The strong tendency of the highly competitive, violent games is to reduce the proportion of boys and young men who play them, and to impede the universal development of wholesome sports accessible to all. To be sure, playing on teams is now confined to school years and three years in college, and is not allowed to students in professional schools; but these limitations have no tendency to make the playing of foot-ball, base-ball, hockey, and basket-ball more general among school boys and students, for the fierce competition makes these games so intense that they are unsuitable for any but a small proportion of the school boys and the students.

The college sport most popular with spectators and newspapers, namely foot-ball, is the least useful of all the games; because a smaller proportional number of students are fit for that sport than for any other. Another objection to all the violent sports is that they cannot be played after the college period. A sport which will be useful to any healthy man until he is sixty is a much more valuable college sport than one that he cannot play after he is twenty-three. Every intelligent youth ought to cultivate sports that he knows will serve him until he is old, rather than those he cannot keep up after he leaves college. The moderate, generally available, and long available sports are also much more wholesome than the violent sports which only a few can endure, and these few only while they are young.

The means of repressing the prevailing exaggeration of athletic sports are obvious, as was stated in the last Report. The number of intercollegiate contests should be reduced to two in each sport during any one season, the rest of the competition in each sport being exclusively home competition. The most successful sport at Harvard, as regards bringing out many competitors for honors in the sport, is rowing; and it has been abundantly proved that the interest in rowing can be fully maintained on two intercollegiate competitions in the year. In order to give this policy a chance to succeed, it would be necessary for two or more colleges to agree that they would permit only two intercollegiate contests in a season in each sport; for it would, of course, be useless for a college team that was permitted only two intercollegiate contests in a season to compete with a college team that was permitted ten or twenty. To turn out on the right day the most perfect team possible in any one of the intense sports, is a piece of administrative business to which much money, the best expert advice, the skill of professional teachers, and the whole life of the players for months must be devoted. One feature of this business is watching the performances of school teams all over the country, and securing the best boy players by offering them favorable opportunities, pecuniary or other. Colleges which go heartily into this business will almost certainly succeed in athletic contests more frequently than colleges which do not. Whether they will so promote the real objects for which colleges exist, is a different matter. Many commercial interests strongly promote the exaggeration of athletic sports in schools and colleges, — as, for example, the hired managers and trainers, the dealers in supplies, the hotels, transportation companies, and newspapers.

The receipts from all the sports at Harvard have been as follows for four years past:—

1903–04.	1904–05.	1905–06.	1906–07.
$110,845.13	$108,071.62	$125,233.71	$106,125.10

The expenses for the same years have been:—

$61,338.55	$63,487.12	$76,690.89	$71,714.14

Freshman foot-ball and Freshman base-ball nearly pay for themselves. Track athletics, foot-ball, base-ball, hockey, and tennis pay for themselves. The principal money-maker among the sports is foot-ball, on account of the enormous crowds that assemble to witness the principal games.

The Committee on the Regulation of Athletic Sports endeavored in 1906–07 to reduce the cost of training tables, and succeeded in some measure with every organization except the boat club and the hockey club. The total expenditures on training tables for four years past have been :—

1903–04.	1904–05.	1905–06.	1906–07.
$7,750.58	$7,101.91	$8,040.06	$6,285.42

When the report of the Joint Committee of the Corporation and Board of Overseers appeared, it was too late to reduce the number of intercollegiate games for the spring of 1907. The new Committee organized in June, 1907, in accordance with the action taken by the Corporation and Overseers, found the schedule of foot-ball games for the fall of 1907 practically settled. They have since confined themselves to preventing any increase in the number of intercollegiate contests; so that no diminution in the number of those contests is to be looked for during the current academic year.

The Committee has not yet succeeded in obtaining any general manager of the sort intended by the Joint Committee of the Corporation and Overseers; so that a great deal of labor still falls on the Faculty members of the Committee, contrary to the intention of the Joint Committee. It was the purpose of that Committee to prevent the devotion of any large portion of the time of professors to the management of athletic sports, the experience of Professors Hollis and Horatio S. White, as Chairmen of the Committee on the Regulation of Athletic Sports, having satisfied those gentlemen and all the members of the Joint Committee that the functions of the Chairman of the Athletic Committee could not be efficiently discharged by any professor without sacrificing both his interests and the superior interest of the University in his function as teacher.

The American modifications of Rugby foot-ball have now been played long enough to make possible a judgment as to the success of eminent foot-ball players in after-life; and the verdict is what might have been expected. It clearly appears that neither the bodily nor the mental qualities which characterize foot-ball players are particularly serviceable to young men who have their way to make in the intellectual callings. Foot-ball toughness is not the kind of toughness which is most profitable in after-life. The weight and insensitiveness needed in the foot-ball line are not the bodily qualities which best serve the man who must make his living by quick, accurate, and inventive thinking. To get accustomed to make one's greatest exertions in the presence of shouting thousands and of the newspaper extra is bad preparation for the struggles of professional men, who must generally do their best work quite alone, or in the presence of a few critical observers. Even for modern warfare the violent, competitive sports afford no appropriate preparation, inasmuch as in real warfare the combatants seldom see each other.

The Acting Dean of the Graduate School of Arts and Sciences calls attention to the fact that in 1906–07 less than one-third of the students in that School were of New England nativity, and that nearly one-sixth were foreign born. An examination of the sixth table in his report (p. 131) shows that the percentage of students in the Graduate School of Arts and Sciences born in New England has distinctly declined during the last eight years, and that the percentage of students born in foreign countries has increased. These facts illustrate the wide range of the educational service which this Department of the University is rendering.

It has been a common opinion that the Harvard Divinity School was better adapted to train theological scholars than parish ministers, that many of its graduates never entered the ministry at all, and that, notwithstanding its non-sectarian quality, nearly all of its students who did enter the ministry were called to Unitarian pulpits. This opinion flies in the face of the facts. The Dean of the School reports (p. 145) that a thorough examination into the subsequent history of the men who have been students in the School during the past ten years, made by the Secretary of the Faculty, "shows that of the 49 students who have received our degree, 36 are now in charge of parishes, 3 are ordained ministers temporarily without settlement, 4 are teachers in theological schools, 2 are engaged in philanthropic work, 2 are still students, one is unaccounted for, and only one is in an occupation not related to the work of the ministry. Of the 180 who have been students at the School, but have not taken our degree, . . . 114 are now in charge of parishes, 6 are teachers in theological and 26 in other educational positions, 7 are ministers at present without settlement, 7 are still students, 3 have entered philanthropic work, 4 are unaccounted for, and 13 have entered unrelated occupations. Of the graduates who entered the active ministry, 65 per cent. were called to Unitarian churches, and 35 per cent. to churches of other denominations. Of the non-graduates, 38 per cent. were called to Unitarian churches, and 62 per cent. to churches of other denominations." This valuable investigation proves that the students of the School become as a rule parish ministers. Their distribution among 12 different denominations is what might be expected from a successful non-sectarian School.

There is always a large interchange of instruction between the Faculty of the Divinity School and the Faculty of Arts and Sciences. In 1906–07, Divinity students made 56 elections of courses offered by the Faculty of Arts and Sciences, and students of Arts and Sciences made 302 elections of courses offered by the Divinity School.

The Summer School of Theology was highly successful in 1907, the attendance being the largest since the first session of the School in 1899; 92 men and 11 women were registered in it.

Edward Henry Strobel, Bemis Professor of International Law, who had been absent for about three years in the service of the King of Siam as General Adviser, resigned his Professorship to take effect November 26, 1906, with the intention of remaining for several years more in the service of Siam. The Corporation accepted this resignation with regret, but with satisfaction that Professor Strobel was exchanging his Professorship for a mission offering unique opportunities of public usefulness. Temporary arrangements were made with Professor George Grafton Wilson, of Brown University, for giving a course on the elements of international law in the second half-year; but the Bemis Professorship has not yet been filled. The express desire of the founder of this Professorship, that the incumbent should have had experience abroad in the public service, causes unusual difficulty in filling the Professorship appropriately.

The year was an interesting one for the Faculty of Medicine, because it was likely to decide the question whether the School could live satisfactorily in its new buildings without incurring an annual deficit. The accounts of the year showed that the estimates of the cost of living in those buildings, made in 1901, before the construction of the buildings was begun, were reasonably accurate, and that the total expense of living in the buildings for the year 1906–07 did not equal the estimated annual cost. It was not possible, however, to close the construction account during the year, because of certain changes, adaptations, and additions which experience in the use of the buildings suggested; and that account is not yet closed, because of some additional work which was not completed at the opening of the current year.

The Corporation decided to charge the construction of the power house ($278,052.56) to that portion of the Henry L. Pierce Residuary Bequest which they had attributed in 1902 to the Medical School undertaking; and they propose to place a tablet in the power house to commemorate this application of a part of that great unrestricted Bequest.

The Corporation further voted to apply to the construction of the new buildings the income, up to the 1st of August, 1907, of the million dollars which they received from Mr. John D. Rockefeller, and to apply the income accrued up to the same date of the

Robert C. Billings Fund, attributed by the Corporation to the Medical School undertaking, to the general account of the Medical School. They applied also to real estate and construction at the new Medical School the unappropriated proceeds of the sale of the former Medical School estate on Boylston Street, with the interest thereon to the 1st of August, 1907. These dispositions having been made, it appeared that there remained for endowment purposes the whole principal of the John D. Rockefeller gift ($1,000,000), and the whole principal of the Robert C. Billings Fund in the Medical School ($100,000), and that a substantial portion ($71,947.44) of the principal of the Henry L. Pierce Residuary Bequest appropriated to the Medical School undertaking still remained. Thereupon the Corporation voted that the principal of the John D. Rockefeller gift, namely, one million dollars, be held from August 1, 1907, as an endowment for the Medical School under the name of the John D. Rockefeller Fund. The unused balance of the Henry L. Pierce Fund in the Medical School is to be held to pay for future additions to the power house, when the hospitals which have bought land in the immediate vicinity of the Medical School shall be ready to take heat, light, and power from the School's power house.

The account of the Medical School for the year 1906–07 gave a satisfactory answer to the serious question — can the Medical School with its present endowment live in a creditable way in its new buildings? The receipts for the year were increased by two large items which will not recur, namely, accrued income from the R. C. Billings Fund to the amount of $24,583.32, and a balance of accrued income on the H. L. Pierce Fund appropriated to the Medical School, not used for purposes of construction, to the amount of $10,869.93. These two unusual items added together amounted to $35,453.25. This large sum was a resource for 1906–07 which will not be available again. There will, however, be available for the first time during the current year, and in succeeding years, the income of the John D. Rockefeller Fund of $1,000,000 and the income of the R. C. Billings Fund of $100,000; and these two Funds together will probably yield, for the present at least, $50,000 a year. The considerable charges incurred for moving from the Boylston Street building to the new buildings (about $6000) will not recur. Moreover, the new endowments for Professorships in the Medical School were not fully used for the appropriate salaries in the year 1906–07; so that the School will gain some further advantage from these endowments during the current year. On the whole, therefore, the outcome of the year 1906–07 was a favorable one with reference to the adequacy of the present endowment of the School to support the great cost of living in the new buildings. Down to August 1, 1907, the buildings, including grading, terraces, and tunnels, had cost $2,621,026.07; and the land retained for the uses of the School had cost to the same date $296,912.16. The Medical School has issued from its serious undertaking in possession of admirable buildings thoroughly adapted to their uses, and with a permanent endowment which will enable it to live comfortably in the buildings, to restore salaries which had to be reduced from 1902 in consequence of the unexpectedly heavy reduction in the number of the students, and to increase its activities in both its lines of work — instruction and research.

The maximum number of students in the Harvard Medical School was 605, attained in 1901, the last year in which one could enter the School without possessing a degree in Arts or Science. The number rapidly and continuously declined, until it reached 287 in the year 1905–06. From that minimum it has risen to 320 in 1906–07, and 343 in 1907–08. The Faculty may reasonably anticipate a slow return towards the average number of the years 1896 to 1900, namely, 565.

Two existing Professorships in the Medical School were satisfactorily endowed during the year under review — the Professorship of Dermatology by the family of the late Edward Wigglesworth, M.D., who was associated with that department of instruction for nine years, and a Professorship of Otology by Francis D. Lecompte, in memory of the late Walter Augustus Lecompte, his nephew, a graduate of Harvard College in 1893, and of the Harvard Medical School in 1897.

There is no more desirable gift to a university than a fund to endow a professorship; and there is no more desirable memorial in all the world. From the point of view of the university, it ensures the teaching of some important subject so long as the university stands. A named professorship is always an object of desire among university teachers; because in the course of centuries each holder of a named professorship is associated with a long list of worthy men who have been faithful and honored in their day. Thus, the Hollis Professor of Divinity of to-day is associated with men highly valued in their day, who held the office between 1721 and 1840; while the Hollis Professor of Mathematics and Natural Philosophy finds himself associated with six former incumbents of the chair. The present incumbent of the Smith Professorship of the French and Spanish Languages and Literatures finds himself to be the successor of George Ticknor, Henry Wadsworth Longfellow, and James Russell Lowell; and yet the Professorship is only ninety years old. Again, from the point of view of the family or friends who erect such a memorial, the endowed professorship is a source of unfailing satisfaction; because the memorial serves the succeeding generations of students with unbroken continuity and an intellectual inspiration to which the variety inevitable in successive generations of teachers only adds force.

The Medical School made several advances during the year under review. A laboratory of surgical research for special students was established, an example which has been followed later by the Department of Clinical Medicine. A long course of free public lectures was given on Saturday evenings and Sunday afternoons, the object being to give open lectures at the School on a wide range of medical subjects in a manner intelligible to non-professional hearers, and likely to inform the public on important topics in sanitation and contagion, on the possibilities of medical and surgical aid, and on the progress of preventive medicine. The administration of the libraries was greatly improved at no little cost; and in consequence of these changes important gifts of books have been made to the working libraries of the School. Students and instructors alike enjoy the advantages of the new library administration.

The appointment of Dr. Otto Folin as Associate Professor of Biological Chemistry in June last, indicates the purpose of the Medical Faculty and the Governing Boards to rebuild the Chemical Department of the Medical School on a somewhat new plan. Much that was formerly included under the Chemical Department of the Medical School has gone over to the laboratories for Clinical Medicine, maintained in the hospitals and the Medical School, while the Toxicology formerly included in the Chemical Department has been dropped. The present purpose is to develop the chemistry of the vital processes in health and disease, or, in other words, to study the chemical changes in living bodies under normal conditions, and also in the presence of ferments and toxins, animal or vegetable, and of anti-toxins. The new Department will be closely affiliated with that of Physiology on the one hand and that of Pathology on the other.

The report of the Dean of the Medical School (p. 159) gives a complete view of the varied activities of the School as a place of medical and surgical research. The Warren Museum has been re-arranged on a classification based on aetiology, many of the specimens have been mounted or remounted for their better preservation and display, and the labelling of the Museum has been greatly improved.

The choice of elective work by the students of the fourth year, p. 178, shows that the students cling to the traditional subjects of medical instruction, namely, anatomy, clinical medicine, children's diseases, surgery, and obstetrics. The number of choices made of these several subjects varies from 42 to 113, whereas the number of choices in no other subject rises above 19.

The summer courses and the graduate courses may be said to hold their own. In the graduate courses, the individual student does not take so many different courses as formerly, because the courses are now longer and more thorough. In the summer courses the number of laboratory courses chosen declines, while the number of clinical courses attended increases. Neither of these departments of the Medical School is as yet organized and carried on in a way to develop its greatest public usefulness. Both need to be overhauled, and adapted to the changed conditions of study and practice under which medical students and practitioners seek extra or additional instruction.

The report of the Dean of the Dental School (p. 183) brings out clearly the fact that the scope of dental instruction and of dental practice has widened much in late years. The variety of cases treated in the dental clinics, and the variety of the services rendered to patients in the infirmary, increase from year to year. Fractured jaws and cleft palates are frequently treated, and new materials are brought into use, such as porcelain inlays and tips, gold inlays, and carved teeth.

There has been during the past two years a considerable loss of students in the School, which the Dean thinks is largely due to the advanced entrance requirements. It is probable that the School will now slowly recover from the effects of these increased requirements; but a new building is necessary in order to restore the prosperity of the School. The School has occupied the old building on North Grove Street since the Medical School left it; but that building is remote, unattractive, and not well adapted for the uses of the dental infirmary.

The Committee appointed by the Board of Overseers to visit the Bussey Institution studied carefully during 1906–07 the condition of the Institution, and the range and the quality of the instruction there provided. Near the end of the summer they sent in an admirable report, which suggested three different modes in which the School might be reorganized. No one of the plans, however, commanded the assent of the entire Committee.

The special investments in Boston real estate belonging to the Bussey Trust have been changed and on the whole strengthened during the past three years; but the net income to be derived from them, applicable at the Bussey Institution, is only about $7500 a year. Of this sum $1800 is pledged to instruction in Horticulture. There remains only enough to pay the salary of one Professor, and to provide a moderate appropriation for the maintenance of his laboratory. In the minds of the Visiting Committee and of the President and Fellows there seems to be an agreement that this one Professor should be an expert in Entomology; since means of defending the crops or products of agriculture, horticulture, and forestry against noxious insects are the greatest need to-day of these three great interests. Such a Professor would necessarily give a large part of his time to research, and the rest to the training of advanced students. It is in contemplation to provide, chiefly at Cambridge, but partly at the Bussey Institution, for a thorough undergraduate course preparatory to the occupation of the farmer, just as there are already provided at Harvard College and the Bussey Institution courses preparatory to the callings of Forestry and Landscape

Architecture. It is hoped that a scheme of this nature can be devised which will fully utilize all the resources of the Bussey Institution, raise the whole level of its work, and contribute to the diffusion of good agricultural instruction and intelligent agricultural practice.

During the year 1906–07 an addition to Gore Hall was made on the north side of the large wing built in 1876 to supply a new stack, new workrooms, and a catalogue and delivery room. This addition was about 94 by 25 ft. in area, and its external walls above the basement were constructed of concrete blocks. The construction was begun in the autumn of 1906, and was finished, with the exception of some interior fittings, by December, 1907. With its fittings and furniture, the addition will cost nearly $45,000; but, on the whole, the construction must be regarded as an economical mode of supplying the new rooms and the new facilities for conducting the work of the Library. The construction is also interesting as an experiment on enlarging Gore Hall by an extensive use of concrete walls, gradually enveloping nearly the whole of the original building, without destroying any part thereof, or interfering with its continuous use. Plans have been prepared by Professor H. Langford Warren for a great enlargement of the Library, as regards both stacks and reading-rooms, which would bring the south front of the building forward nearly to the north front of Boylston Hall. This enlarged building would hold quite as many books as ought ever to be stored within the College Yard, and would also provide ample reading-rooms, work-rooms, and rooms for small classes which might advantageously hold their meetings within the walls of the Library. This plan could be executed by the process of successive additions, without calling for a very large expenditure at any one time. The addition made in 1906–07 has, therefore, a high value as indicating a practicable policy for the future in enlarging the Library, and a good material to use in such enlargement.

It was the Visiting Committee for the Library, appointed by the Board of Overseers, which brought about the execution of this instructive piece of work, towards which the Committee provided $15,000, or rather more than a third of its cost. The rest of the cost is to be taken from an anonymous fund called in the Treasurer's Statement the "Gift for a New University Library Building."

The endowment received under the will of the late Mrs. Sarah E. Potter (about $196,000) taken with the earlier endowments called the Asa Gray Professorship Fund, the Asa Gray Memorial Fund, and the Robert Charles Billings Fund will hereafter provide the Herbarium with an assured income. It is thus definitely placed on a permanent footing, as every such scientific establishment should be, in order that its work may be planned far in advance and may be steadily prosecuted through years of unremitting, well-directed labor. The next need of the Herbarium is a new building; but this building should be planned and constructed with a view to bringing together under one roof all the sections of the Botanical Department. The Curator of the Herbarium acknowledges anew the great obligations of the establishment to the Overseers' Visiting Committee, of which Mrs. Potter was an interested and active member.

All persons who remember the great contributions made by Asa Gray to Botanical Science will rejoice that the Herbarium which he founded, and which bears his name, is now sure to maintain its high rank among similar establishments.

One of the contributions of the University to the great subject of Economic Botany is the supervision given by the Director of the Botanic Garden to the experiment station in Cuba, which is conducted on the sugar estate of Mr. Edwin Farnsworth Atkins, and at his expense. Mr. Atkins has made it possible to conduct there on a large scale difficult experiments, the results of which may be imperilled in any season by unfavorable weather, and at the best are likely to remain for several years in doubt. The station has lately obtained a striking success in its experiments on cane seedlings. The Director remarks that "the cane seedlings are proving good in every way, and the last are the best." The range of tropical and sub-tropical species cultivated at this station is being constantly widened. This coming winter renewed attempts will be made to bring in the new caoutchouc plants, and also to begin the study of certain new varieties of cacao.

The Director of the Arnold Arboretum announces (p. 231) that the preparation of the ground for the type collection of hardy shrubs has been finished, and the collection planted in nearly a mile and a half of beds ten feet wide.

A special subscription was raised in order to begin during the year the systematic study of the trees and shrubs of Central and Western China, a mountainous region with a climate similar to that of the Southern Appalachian region of North America. The Director states that this is the only part of the world remaining botanically unexplored, the trees of which may be expected to flourish in the northern United States, and that results of scientific and practical value may be expected from the study of the region and from the introduction of its plants into American and European plantations. Seeds for a large number of plants new to cultivation have already been received from the collector in charge, and there is every reason to hope that this new enterprise will prove to be one of the most useful pieces of work undertaken by the Arboretum.

The diminution in the number of students following the prescribed four-year courses of the Lawrence Scientific School reduced somewhat the resort to the laboratory courses in the Division of Chemistry. The number of laboratory courses offered has been greater during the past four years than in the preceding years. The number of research courses offered has increased from four in 1895–96 to six in 1906–07, and the annual elections of such courses have increased from seven to twenty-seven within the same period. Since the number of elections of laboratory courses is not now quite so great as it was two or three years ago, the pressure on the laboratories has a little diminished; but still Boylston Hall is overcrowded, and a new modern laboratory for Chemistry is one of the urgent needs of the University.

The Division of Engineering has been temporarily somewhat inconvenienced by the transfer of the S. B. degree from the Lawrence Scientific School to Harvard College; but the organization of the Graduate School of Applied Science will unquestionably prove of great ultimate advantage to this Division. Already the Chairman of the Division recognizes (p. 248) that the single Committee on Admission which has been for two years acting on all applications for admission to the College and to the Scientific School has enforced improved entrance requirements more uniformly, and thereby secured an improvement in the quality of the students who enter the University with the intention of pursuing a scientific profession. He has observed a noticeable improvement in the preparation of the students, which has made the "teaching of Engineering much more satisfactory." The Chairman also states that the number of students who are working toward an engineering degree has increased.

Two unrestricted gifts to the Observatory of $5000 each have permitted a considerable extension in the work of publication, and a moderate increase in the number of competent assistants employed in the study of the great collection of astronomical photographic plates. The Director remarks (p. 258), — "The amount of valuable material contained in these plates is indeed vast. Every day examples occur of the ease and economy with which astronomy may thus be advanced. An admirable field of work for women has been opened, and a great increase in the number now engaged in this work is much to be desired." As an illustration of this statement the "Second Catalogue of Variable Stars" by Miss Cannon may be cited, the most complete work of its kind yet published. Of the 3,748 known variable stars, 2,909 have been discovered at the Harvard Observatory. Again, Vol. 60 of the Annals of the Observatory, No. 4, gives accurate positions of 1,777 variable stars discovered by Miss Leavitt in the Magellanic Clouds, and No. 5 of the same Volume is a Memoir on Ten Algol Variables discovered and discussed by her.

The Library of the Observatory — one of the finest of its kind in the world — is in constant danger of destruction by fire, being scattered through the rooms of the Observatory which is in the main a wooden building. A fire occurred in the residence on March 4, 1907, which would have destroyed the entire structure, together with the east wing, but for the efficiency of the fire department of the Observatory. A moderate sum would erect for the Library an extension of the detached fireproof building now used for storing the photographic plates.

The Curator of the Museum of Comparative Zoölogy calls attention (p. 262) to the permanent value of Louis Agassiz's three ideas, on which the arrangement of the Museum was based,—first, synoptic collections exhibiting the principal types of form and structure; secondly, systematic collections with extensive series of typical specimens; and thirdly, faunal collections to illustrate the geographical distribution of the animals of the land and the sea. These ideas "have the same interest and importance they had when the Museum was founded in 1859, and have given the Museum an individual character of its own." It is well to recall in this hundredth year from the birth of Louis Agassiz the indebtedness of the Museum to his genius.

A new series of specimens of bird architecture has proved to be of great popular interest, although as yet it is limited in extent. Several much interested experts have contributed to the formation of this instructive exhibit.

An admirable model of Bora Bora, the most striking of the Society Islands and an excellent type of the structure and formation of the coral reefs of that group, executed by Mr. George Carroll Curtis, who spent several months on the Island in 1900 at the instance of Mr. Agassiz, has been presented to the Museum by Mr. Agassiz.

The collections were improved and enriched in many directions during the year under review. The valuable library continues to grow at the rate of about a thousand volumes and nearly two thousand pamphlets a year. The rate of publication of the Memoirs and Bulletin is fully maintained.

A beginning was made in February and March last of providing free illustrated lectures on popular scientific subjects at the University Museum. The lectures were given on Sunday afternoons at 3.30 o'clock, and were open to the public. The subjects treated were all related to existing exhibits in different parts of the Museum; so that the auditors could subsequently find in the Museum itself ample illustrations of every lecture. The subjects were as follows:—

(1) Meteorites, (2) The Ancient People of Yucatan, (3) Why the Earth is believed to be Millions of Years Old, (4) Tropical Plants, (5) Volcanoes, active and extinct.

These lectures were so successful that it is intended to give another series during the present year.

The Chairman of the Department of Geology and Geography reports (p. 274) that the demand for graduates of the Department to take positions in the United States Geological Survey and to teach geology and geography in other institutions was greater at the close of the year than the Department could supply. The Survey and the colleges usually prefer, however, young men who have obtained a Doctor's degree; and many meritorious young men lack means of support for so long a period of training. To such men scholarships or assistantships are indispensable aids. Many excellent students prefer assistantships to scholarships. This preference suggests that the endowment of assistantships in one or more departments of instruction would be an excellent form of educational endowment.

The Chairman of the Division of Mining and Metallurgy gives (p. 286) a demonstration that nearly 90 per cent. of the graduates of this Department, which was established only in 1895, "are continuing in the work for which they were trained, and that a fair proportion of them have already reached executive positions of responsibility. On the financial side, when it is considered that the average age of these men is about twenty-seven years (the oldest being not yet thirty-four), and that they have been at work on the average only a little more than four years, it is clear that they have done well,— probably decidedly better than the average young doctor or lawyer, and unquestionably better than the average young graduate in other branches of engineering." He prints in evidence a table of the earnings of 26 graduates who are earning from $1000 to $5000 a year.

Mining is a highly organized industry requiring large associations of men and capital, and a complex organization, and it is not a Massachusetts, or even a New England, industry on any large scale. Nevertheless, this Division of the University has already become distinctly successful from every point of view, and has demonstrated its success.

For twenty years explorers and collectors in North, Central, and South America have been zealously contributing to the stores of the Peabody Museum, — some of them employed by the Museum, and others by friends and supporters of the Museum, and others again, moved by personal interest in anthropology, giving the fruits of their own labors in the field. The original building has once been enlarged; but there is urgent need of another enlargement which would close the gap between the present building and the southern corner-piece of the University Museum. The gap is one hundred feet long; so that large accommodations of various sorts would be obtained, such as more exhibition rooms and work-rooms, a laboratory, a lecture-room, and a proper library-room. The Museum works in a field which will soon be exhausted. It is for this generation to complete and arrange systematically collections to illustrate American archaeology and ethnology; for future generations will not have the like opportunities.

Experience has proved that the collections of the Fogg Museum of Fine Arts are not to be confined, as was originally proposed, to reproductions and prints, but are to include precious original objects, such as statues, paintings, vases, and metal work. Thus, in November, 1906, the Museum received an admirable painting by one of the most important Flemish masters of the 15th century — a characteristic and beautiful specimen in excellent condition. It also received an ancient statue of Aesculapius in marble. For the exhibition of such objects, the present building was not designed, and is not well adapted; so that there is already need of additions to the building.

The Dean of Radcliffe College reports the completion and occupation of a second hall of chambers, and the completion of the new library building. The College has made much progress in recent years towards the possession of a liberal area of land and an adequate number of suitable buildings. Endowments, the income of which is applicable to teachers' salaries, are the next acquisitions which the friends of the College must desire for it.

The Stillman Infirmary continues to be very useful, particularly for the treatment of the somewhat numerous surgical cases to which the rough athletic sports give rise, and for the isolation of contagious diseases. Among the surgical cases it is to be observed that a relatively large percentage are injuries and septic wounds of the knee, ankle, and foot. There was no serious epidemic among the students of the University during the year. Diphtheria, which was the principal contagious disease in 1905–06, appeared at the Infirmary with only four cases in the year under review; and mumps was the only contagious disease which appeared in more than twenty cases. In a total of 467 medical and surgical cases at the Infirmary there was but one death, and that was from cerebro-spinal meningitis — a disease for which any hopeful treatment is yet to be discovered.

The service of the Stillman Infirmary to the University it would be hard to overstate. It has relieved the administrative officers from constant anxiety about sick or injured students, and from no little labor in securing proper care for them; for a small annual fee it insures to every student in Cambridge the best possible care in case he is sick or injured; and it gives parents who live at a distance the assurance that if their sons fall ill, or are injured, they will immediately receive under the most favorable conditions the best treatment that medical or surgical skill can give.

An interesting experiment was tried in Memorial Hall from June 27 to August 9, 1907, for the purpose of accommodating members of the Summer Schools, and other registered members of the University. Cereals, bread, rolls, cake, soups, and a selection of vegetables were offered on the American plan at seventeen cents a meal; while meats, fish, eggs, salads, fruit, tea, coffee, chocolate, milk, lemonade, and desserts were offered at prices just sufficient to cover their cost and the cost of the service. These latter articles were to be paid for only when ordered. This plan gave satisfaction to the persons who used the Hall; but caused a loss of $3884.62 to the College, because the number of persons who made use of the Hall was insufficient to meet the cost of running so large an establishment. This is the second summer in which it has proved impossible to carry on Memorial Hall without loss as a restaurant for a few hundred persons whose attendance is not regular. In earlier years it was found impracticable to carry on Randall Hall for Summer School students; so that it will be necessary to close both Halls in summer until existing conditions have been materially modified.

A university which desires for the benefit of its students to win and maintain a resort to it from all parts of a continental national territory needs some administrative officers who study the question — how the facilities and capacities of the university may be brought to the knowledge of young men all over the country, or of their parents and teachers. This study is a difficult one; but the best opinion is that knowledge of Harvard University, or of any one of its Departments, is best spread through former members of the University, and that circulars and advertisements are comparatively ineffective. Thus, 360 persons, mostly teachers, who were members of the Summer School in Arts and Sciences in 1907, answered the question — how they first heard of the Harvard Summer School. Two-thirds of them heard about it from a former member of the University, a friend who knew about the University, or through a reply received from a Harvard official to a direct inquiry. Only 15 per cent. heard of the Summer School through a circular sent from the University, an advertisement, or a news item in a periodical. The inquiry was undertaken because the Harvard Summer Schools have felt keenly the competition of the numerous summer schools established elsewhere within recent years. Thus, five years ago, 84 students from Maryland, Missouri, and Texas attended the Harvard Summer School; in 1907 there were but 14 students from those States. Other summer schools have acquired the influence and the opportunities of service which Harvard has lost. It is obvious that the good-will and active advocacy of its graduates and students are the best sources of any university's prosperity as regards both pecuniary resources and number of students.

A modification of the scheme under which Randall Hall is conducted was made by the President and Fellows on the 27th of May; the title Manager was substituted for the title Steward, and in the following definition of the powers of the Manager, the words "except the Auditor" were substituted for the words, "other than students." The new definition is as follows: "The Manager shall make all purchases of provisions for the Association, shall order all urgent repairs, shall employ and direct all employees, except the Auditor, and shall have general care of the Hall."

The last few years have repeatedly illustrated the advantages of carrying on Memorial Hall and Randall Hall under two different schemes. If a mistake in judgment is made by the Directors of one Hall, the other Hall usually profits by it; and many of the students who are dissatisfied with one of the Halls resort forthwith to the other. The cost of board at Memorial Hall is, on the average and in the long run, higher than in Randall Hall; because the range of weekly cost between the lowest and the highest charges to members is much greater at Memorial Hall. Accordingly, in any period of business depression and family retrenchment, Randall Hall will gain and Memorial Hall is liable to lose members. The heavy debt of the Association using Memorial Hall, a debt chiefly incurred in 1905 in reconstructing the kitchens, store-rooms, and serving-room, and replacing nearly the whole equipment of the Hall, is a severe handicap for the Association to carry, although the annual payment for reduction of the debt is a small one, — so small indeed that the debt will, in all probability, not be extinguished within the life of the new "plant." An endowment which would extinguish the debt (about $170,000) in — say — twenty years, and leave a permanent maintenance fund of $50,000, would secure the life of a very helpful and democratic institution, the Harvard Dining Association.

In general, the plan for charging at the rate of $20 per course for courses taken in addition to the number prescribed in any year, — namely, five in the Freshman year and four in any other year, — worked smoothly in 1906–07, and without raising doubts or objections in the minds of either officials or students. On two points, however, additional regulations proved to be needed. In the autumn of 1906, the question arose in the Bursar's office as to the fees for additional courses to be charged Freshmen who had anticipated some College studies, as, for instance, English *A*. Were such Freshmen to be allowed to take five courses without extra charge, when four courses were all that were required of them? To meet this difficulty the President and Fellows adopted a rule that Freshmen be charged at the rate of $20 a course, in addition to the general tuition fee of $150, for each course or half-course taken in addition to the amount of work prescribed in each individual case. At the same time the Corporation voted that laboratory instruction which counted for more than one course toward a student's degree, whether research work, or instruction primarily for graduates, or for undergraduates and graduates, should be charged for at the usual rates for as many courses as should represent the amount of time devoted to the subject by the student, and that in estimating this time it should be assumed that all of the student's working time, not devoted to other specified and accepted courses or occupations, was given to this instruction.

On Commencement Day a gift was announced of $100,000 from the Class of 1882 on the celebration of the 25th anniversary of their graduation, the income to be used at the discretion of the Corporation "for the general purposes of the College." In the present state of the College finances, there can be no question that the income of this very welcome fund will be appropriated to College salaries.

By vote of the Corporation on the 27th of May, twenty-five University Scholarships, all with an income of $150 each, were added to the fifteen such Scholarships already existing in the Graduate School of Arts and Sciences. It is the desire of the Corporation that these new Scholarships should be used to promote the resort to the Graduate School of students who have received their first degree at other colleges, and particularly of students who come from the more distant parts of the country, and have demonstrated their capacity and character at the institutions which they have previously attended.

The Corporation having observed that the friends of the University are sometimes solicited to give money simultaneously for several different objects, thereby creating a conflict of benevolences, and are sometimes asked to contribute to the promotion of objects which the Corporation have not had opportunity to consider, adopted on the 25th of February, 1907, the following vote: —

Voted, That those who propose to ask the general contribution of the friends of the University for the erection of a building, or for any other purpose, are earnestly requested to confer with the Corporation, and to obtain its approval before subscriptions are asked. The generosity of the givers will thus be made most helpful.

It was far from the intention of the Corporation to dampen the zeal of friends who desire to promote the cause of education through Harvard University. They only desired to avoid conflicts between differing, simultaneous proposals, and to obtain early information themselves about every movement to raise money for the University by the general contributions of its friends.

Some good friends of Harvard College have manifested a strong desire to experiment in Cambridge on the introduction of the English college system, whereby a group of students are lodged together in chambers around a pleasant, open court, and are provided with a chapel, dining hall, common rooms, and perhaps a library of their own, and there live in close contact with a warden, or master, and a group of older students called fellows. It is apparently an essential feature of this English method that the group of associated teachers and fellows should hold property of their own, and, therefore, have a tolerably independent corporate existence; and this feature of the English system it would be very difficult to introduce into Harvard University, whose whole property is held by a single board — the President and Fellows. Nevertheless, the George Smith Bequest seems to offer a chance to try an experiment on a group of halls which might be placed in charge of a master supported by holders of fellowships, and might provide for the students that live there common rooms, a dining hall, and a reading room. The will of George Smith, of St. Louis, provided as follows: —

> "All the rest and residue of my estate, real, personal, or mixed, or wheresoever situated, I give, devise, and bequeath to Harvard University of Cambridge, Massachusetts, my alma mater, for the following purposes, to wit: to build on a rectangular plot of ground, owned by said University, three dormitories of equal size and cost, one to be inscribed 'The James Smith,' one the 'Persis Smith,' and one 'The George Smith Hall.' Said fund to be securely invested by said University, and the accruing income to be added to the principal until said principal fund reaches the sum of $450,000, when it shall be invested by said University in the above-named three dormitories."

The balance of this fund on the 1st of August, 1907, was $310,151.24, and the fund is chargeable with an annuity of $900.

In seven or eight years the fund will probably reach its limit of $450,000.

In the meantime, the following questions might be under consideration : —

(1) Should this group of dormitories be fenced and barred in the English fashion, and the English "gateing" method be adopted for it? (2) Would American students choose to live in a quadrangle thus arranged? (3) Should any provision be made for a chapel and religious services, and if so, who should pay the cost of that establishment? (4) Should the students living in these halls receive instruction from the warden and fellows who also live there, and if so, who should pay for that instruction? In other words, should the attempt be made to imitate here the relations — pecuniary and friendly — of an English undergraduate to his college tutor? These questions certainly present considerable difficulty.

On the 25th of June the Corporation authorized the President to enter into an arrangement with the University of Lyons whereby an accredited graduate from that University might be admitted to the Graduate School of Arts and Sciences without payment of any tuition fee, it being understood that a similar privilege would be offered in exchange to a graduate of Harvard University by the University of Lyons. It is obvious that exchanges of this sort might be multiplied with mutual advantage to the cooperating universities. From the pecuniary point of view they amount at Harvard University to an increase in the number of University Scholarships in the Graduate School. The University of Paris and Harvard University have made a similar exchange for several years past with advantage; but in this case the young men who represent each University at the other, hold Fellowships, and may be called upon to give some instruction.

In October, 1906, the Corporation received through the President a memorandum entitled a "Plan for the Removal of the Andover Theological Seminary to Cambridge," the memorandum proceeding from a Committee of the Trustees of Phillips Academy. The President was instructed to lay the memorandum before the Harvard Faculty of Divinity for their consideration.

The Faculty duly considered the memorandum; and an interchange of views resulted between the Faculty and the President and Fellows on the one hand, and the Committee of the Trustees of Phillips Academy and some members of the Faculty of Andover Seminary on the other. It later appeared that the plan which resulted from these conferences was not capable of legal execution, and was, moreover, not agreeable to the alumni of the Seminary. In consequence the negotiation was abandoned before the end of the year.

The deficit of 1906–07 in the combined accounts of the University, College, Scientific School, Graduate School of Arts and Sciences, and Library, was $16,713.64 against $59,296.31 in 1905–06, a material reduction due, not to diminished outlays, but to increased receipts. These increased receipts were derived from several sources: first, from the fees for courses which students elected in addition to the number of courses required of them; secondly, to a better renting of college rooms; thirdly, to a small increase in the number of students in the Departments named; and fourthly, to a slightly higher rate of interest on the general investments. It seems probable that the fees from additional courses will prove to be a valuable resource, until the number of courses required for the degree of Bachelor of Arts or Bachelor of Science shall be a little reduced, and three years shall be the usual accepted residence for either of these degrees. When that time comes, the only way to keep the total of tuition-fees up to its present level will be to increase slightly the yearly fee of $150. This advance has already been made for students who follow the old four-year programmes in the Lawrence Scientific School. The Corporation will charge the deficit of the year to the Henry L. Pierce Fund, a Fund unrestricted as to both principal and income. It seems to be impossible to reduce the sum total of general expenses in this account, at least so long as wages and the cost of materials remain at their present level. The only way, therefore, to prevent the recurrence of deficits in this Department is to diminish the number of salaried places. This policy the Corporation began to put into practice two years ago, and must continue to follow.

The attention of the Overseers and the Alumni is respectfully invited to the following Reports of the Deans of the Faculties and Schools, and the Directors of the Scientific Establishments. They are necessary to an understanding of the present activities and policies of the University.

CHARLES W. ELIOT, *President*.

CAMBRIDGE, January 7, 1908.

REPORTS OF DEPARTMENTS.

THE FACULTY OF ARTS AND SCIENCES.

To the President of the University: —

Sir, — I have the honor of presenting a report on the work of the Faculty of Arts and Sciences for the academic year 1906–07.

Besides the President, the Faculty contained seventy-seven Professors, two Associate Professors, fifty Assistant Professors, one Lecturer, twenty Instructors, the Assistant Dean of Harvard College, the Recorder, and the Secretary to the Corporation, — in all one hundred and fifty-three members.

Instruction in 1906–07.

With the following list of courses of instruction that were actually given under the authority of the Faculty, I print a statement of the number and the classification of the students in each course. The figures are those officially returned to the Recorder by the several instructors at the close of the academic year, and take no account of persons who, regularly or irregularly, attended the exercises and did the work of a course without being officially recognized as members of it. The abbreviations are those ordinarily used in such lists :—

COURSES OF INSTRUCTION GIVEN IN 1906–07.

Semitic Languages and History.

For Undergraduates and Graduates : —

1. Dr. Haynes. — Hebrew (elementary course). Explanation of parts of Genesis and of the Book of Psalms. 2 Ju., 1 So. Total 3.

12. Professor G. F. Moore. — History of Israel, political and social, till the capture of Jerusalem by the Romans. 2 Se., 5 Ju., 2 So., 6 Di. Total 15.

16. Professor G. F. Moore. — History of Jewish Literature from the Earliest Times to 200 A.D. 2 Ju., 1 So., 5 Di. Total 8.

13. Professor Toy. — History of the Hebrew Religion, with comparison of other Semitic Religions. 1 Gr., 1 So., 7 Di. Total 9.

15 *hf.* Professor Toy. — History of the Bagdad Califate. Mohammedanism in Egypt and India; Mohammedan Law; The Crusades; The Korān. 2 Gr., 1 Di. Total 3.

Primarily for Graduates: —

2. Professor Toy. — Hebrew (second course). Interpretation of parts of the Prophets and the Poetical Books. 1 Fr., 1 Di. Total 2.

3*b*. Dr. Haynes. — Classical Aramaic (second course). 1 Di. Total 1.

‡4. Dr. Haynes. — Assyrian. 1 So. Total 1.

‡7. Dr. Haynes. — Arabic. Brünnow's Chrestomathy. 1 So. Total 1.

‡8. Professor Toy. — Arabic (second course). The Moallakāt; Motenebbi; Ibn Ḫaldun; The Korān. 1 Di. Total 1.

Indic Philology.

For Undergraduates and Graduates: —

1*a* [1]*hf*. Professor Lanman. — Elementary Sanskrit. 1 Gr., 1 Se. Total 2.

Primarily for Graduates: —

‡2 [1]*hf*. Professor Lanman. — Vedic Sanskrit. Introduction to the language and literature of the Vedas. Hymns of the Atharva-Veda, the Rig-Veda, etc. 1 Gr., 1 So., 1 R. Total 3.

‡3 [2]*hf*. Professor Lanman. — Vedic Sanskrit. Continuation of the study of the Vedas. 1 Gr., 1 So. Total 2.

‡9. Dr. Woods. — Philosophical Sanskrit. Patanjali's Commentary on the Yoga philosophy (Yogabhāshya), with selections from the Sānkhya books. 1 Gr., 1 So. Total 2.

Course of Special Study.

‡20*c*[2]. Professor Lanman. — Weekly meetings at the instructor's study for the rapid reading of Sanskrit or Pāli texts. 1 Gr., 1 So., 1 Instr. Total 3.

The Classics.

Primarily for Undergraduates: —

Greek.

G. Dr. C. N. Jackson. — Course for Beginners. 2 Se., 3 So., 8 Fr., 3 Sp. Total 16.

A. Dr. E. Cary. — Greek Literature. Homer, Odyssey; Euripides and Aristophanes. 1 Se., 5 So., 13 Fr. Total 19.

B. Asst. Professor Harris, and Drs. C. N. Jackson and E. Cary. — Greek Literature. Plato; Lysias; Xenophon; Elegiac, Iambic, and Lyric Poets; Euripides. Lectures on the History of Greek Literature. 2 So., 54 Fr. Total 56.

E hf. Dr. C. N. Jackson. — Greek Prose Composition (first course). 1 So., 8 Fr. Total 9.

1*a* [1]*hf*. Asst. Professor Harris. — Greek Literature. The Period of Athenian Supremacy. Herodotus; Aeschylus; Plutarch. 2 Ju., 6 So., 6 Fr. Total 14.

1*b* [2]*hf*. Dr. E. Cary. — Greek Literature. The Period of Athenian Supremacy. Thucydides; Aristophanes; Sophocles. 5 So., 5 Fr. Total 10.

2. Asst. Professors Gulick and Harris. — Greek Literature. Aristophanes; Thucydides; Aeschylus; Sophocles. 1 Ju., 18 So., 1 Sp. Total 20.

3 *hf.* Asst. Professor Harris. — Greek Prose Composition (second course). 1 Gr., 1 Se., 2 Ju., 8 So. Total 12.

Latin.

B. Professors Howard and Clifford H. Moore, Associate Professor C. P. Parker, Asst. Professor E. K. Rand, and Dr. Pease. — Latin Literature. Livy; Horace; Terence. 1 Se., 1 Ju., 9 So., 139 Fr., 2 Sp. Total 152.

E hf. Asst. Professor E. K. Rand. — Latin Composition (first course). Translation of English narrative. 1 Ju., 2 So., 13 Fr., 1 Law. Total 17.

1. Professor Clifford H. Moore and Associate Professor C. P. Parker. — Latin Literature. Tacitus; Horace; Catullus. 2 Ju., 23 So., 1 Sp. Total 26.

2a [1]*hf.* Asst. Professor E. K. Rand. — Latin Literature. General View of Latin Poetry. 1 Gr., 2 Se., 2 Ju., 6 So., 1 Fr., 1 Sp. Total 13.

2b [2]*hf.* Asst. Professor E. K. Rand. — Latin Literature. Tacitus. 1 Gr., 2 Ju., 6 So., 1 Fr., 1 Sp. Total 11.

3 *hf.* Professor Clifford H. Moore. — Latin Composition (second course). 1 Se., 1 Ju., 8 So., 1 Fr. Total 11.

For Undergraduates and Graduates: —

Greek.

6. Professor Weir Smyth. — Greek Literature. Demosthenes; Aeschines; Aeschylus; Sophocles; Aristophanes. 3 Gr., 1 Se., 7 Ju. Total 11.

7 *hf.* Asst. Professor Gulick. — Greek Prose Composition (third course). 6 Gr., 2 Se. Total 8.

9. Professor Ropes. — Introduction to the Study of the New Testament. The Origin and History of the New Testament Writings; the Teaching of Jesus Christ and of the New Testament Authors. 2 Gr., 1 Se., 1 Ju., 3 So., 1 Fr., 8 Di. Total 16.

8. Professor Goodwin and Associate Professor C. P. Parker. — Plato; Aristotle. Survey of Greek Philosophy from Thales to Aristotle. 5 Gr., 4 Se. Total 9.

17 [2]*hf.* Asst. Professor Harris. — Greek Literature. Four Plays, with studies of their influence in Art and in the Drama of later ages. For 1906–07: Aeschylus (Choephoroe), Sophocles (Oedipus Tyrannus), Euripides (Bacchae), Aristophanes (Wasps). 1 Gr., 4 Se., 2 Ju., 3 So., 2 Fr. Total 12.

10. Asst. Professor Gulick. — The Life of the Ancient Athenians, described and illustrated by the aid of the Literature and of the Monuments. 2 Gr., 18 Se., 27 Ju., 25 So., 3 Sp., 1 Sc. Total 76.

11. Professor J. W. White. — History of the Greek Drama. Lectures on the Dramatic Art and Literature of the Greeks, and on the influence of the Greek drama on Modern Literature. Aeschylus; Sophocles; Euripides; Aristophanes. 5 Gr., 39 Se., 39 Ju., 55 So., 1 Fr., 4 Sp. Total 143.

LATIN.

6. Professor **HOWARD**. — Latin Literature. Suetonius; Pliny; Juvenal; Martial. 2 Gr., 4 Se., 11 Ju., 2 So. Total 19.

7 *hf*. Associate Professor C. P. **PARKER**. — Latin Composition (third course). 8 Gr., 1 Se., 1 Ju. Total 10.

8. Professor **MINTON WARREN** and Associate Professor C. P. **PARKER**. — Latin Literature. Cicero; Lucretius; Plautus. 3 Gr., 5 Se., 1 Ju., 1 Fr. Total 10.

14 [1]*hf*. Professor **MINTON WARREN**. — Latin Literature. Cicero's Correspondence. 2 Gr. Total 2.

Primarily for Graduates: —

CLASSICAL PHILOLOGY.

‡25 [2]*hf*. Professor **CLIFFORD H. MOORE**. — Introduction to the History of Classical Studies and to the Interpretation and Criticism of Classical Authors. 7 Gr., 3 Se. Total 10.

38. Professor J. W. **WHITE**. — The Comedies of Aristophanes. 12 Gr., 1 Ju. Total 13.

‡44 [1]*hf*. Asst. Professor **GULICK**. — Thucydides. 1 Gr., 1 R. Total 2.

‡72. Professor **ROPES**. — The Epistles of St. Paul 2 Di., 2 R. Total 4.

‡83 [1]*hf*. Professor **ROPES**. — The Gospel and Epistles of St. John. 2 Di. Total 2.

‡54 [2]*hf*. Professor **ROPES**. — The Acts of the Apostles. 4 Di., 1 R. Total 5.

68. Professor **MINTON WARREN**. — The Comedies of Plautus. 6 Gr., 2 Se. Total 8.

16 [1]*hf*. Asst. Professor E. K. **RAND**. — The History of Pastoral Literature. The Classical Pastoral and the Latin Pastoral of the Middle Ages and the Renaissance. 5 Gr. Total 5.

‡41 [1]*hf*. Professor **CLIFFORD H. MOORE**. — The Roman Historians to Tacitus. 6 Gr., 2 R. Total 8.

‡42. Professor **WEIR SMYTH**. — History of Later Greek Literature (the Alexandrian and Roman periods). 7 Gr., 1 Se., 4 R. Total 12.

30 [2]*hf*. Asst. Professor **GULICK**. — Introduction to Greek Palaeography. 6 Gr., 1 Se. Total 7.

31 [2]*hf*. Professor **MINTON WARREN**. — The Elements of Oscan and Umbrian. 1 Gr. Total 1.

‡55 [1]*hf*. Professor **MINTON WARREN**. — Interpretation of Latin Inscriptions important for their Language or Content. 4 Gr., 2 R. Total 6.

51 [1]*hf*. Professor **HOWARD**. — Roman Political Antiquities. 9 Gr. Total 9.

‡67. Asst. Professor **CHASE**. — Pausanias, with special reference to the Monuments of Delphi and Olympia. 2 R. Total 2.

64. Asst. Professor **CHASE**. — General Introduction to Classical Archaeology. 2 Gr., 3 Se., 1 Ju. Total 6.

20. The Seminary of Classical Philology.

Professors Weir Smyth and Howard, Directors for 1906–07. — Training in philological criticism and research. Text-criticism and interpretation of Greek and Latin authors: for 1906–07, Aeschylus and Suetonius.
5 Gr. Total 5.

English.

English Composition.

Primarily for Undergraduates: —

A. Professors Briggs and Hurlbut, Drs. Webster, Greenough, and Hutchison, Messrs. Nutter, Stearns, Hersey, Post, L. Lewis, Brooks, Chase, Hatch, and Shipherd. — Rhetoric and English Composition.
15 So., 394 Fr., 92 Sp., 24 Sc. Total 525.

BChf. Mr. T. Hall. — English Composition.
2 So., 3 Fr., 8 Sp., 21 Sc. Total 34.

22. Dr. Maynadier, and Messrs. Coues and McNeill. — English Composition.
15 Se., 19 Ju., 27 So., 2 Fr., 7 Sp., 1 Sc., 1 Bu. Total 72.

31^{2}*hf.* Mr. W. R. Castle, Jr. — English Composition.
2 Ju., 13 So., 17 Fr., 2 Sp. Total 34.

D$^{1\text{ or }2}$*hf.* Mr. W. R. Castle, Jr., and Messrs. Bellows, Blake, and Stoddard. — English Composition.
4 Se., 6 Ju., 97 So., 108 Fr., 9 Sp., 3 Sc. Total 227.

18. Professor Baker and Mr. Curtis. — The Forms of Public Address.
1 Gr., 8 Se., 40 Ju., 13 So., 2 Sp. Total 64.

30^{2}*hf.* Professor Baker and Mr. Curtis. — Debating.
8 Se., 7 Ju., 4 So., 1 Sp. Total 20.

For Undergraduates and Graduates: —

12. Mr. Copeland. — English Composition.
3 Gr., 8 Se., 7 Ju., 4 So., 1 Fr., 6 Sp. Total 29.

Primarily for Graduates: —

5. Professor Briggs. — English Composition (advanced course).
14 Gr., 7 Se., 6 Ju., 3 So., 1 Fr., 1 Sp., 1 Di., 1 Law. Total 34.

English Literature.

Primarily for Undergraduates: —

28 *hf.* Professors Briggs, Wendell, Kittredge, and Baker, and Mr. T. Hall. — English Literature. History and Development of English Literature in outline.
1 Gr., 138 Fr., 5 Sp. Total 144.

For Undergraduates and Graduates: —

8*a* ^{1}*hf.* Dr. Webster. — Anglo-Saxon.
15 Gr., 8 Se., 3 Ju., 1 Fr., 1 Sp. Total 28.

1. Professors F. N. Robinson and Schofield. — English Literature. Chaucer.
17 Gr., 7 Se., 1 Ju., 3 So., 2 Sp. Total 30.

2. Professor Kittredge. — English Literature. Shakspere.
25 Gr., 15 Se., 22 Ju., 23 So., 2 Fr., 7 Sp. Total 94.

11*a* [1]*hf*. Professor NEILSON. — English Literature. Bacon.
3 Gr., 15 Se., 7 Ju., 13 So., 3 Fr. Total 41

11*b* [2]*hf*. Professor NEILSON. — English Literature. Milton.
6 Gr., 4 Se., 4 Ju., 15 So., 5 Fr., 2 Sp. Total 36.

32*a* [1]*hf*. Dr. MAYNADIER. — English Literature of the Elizabethan Period. From Tottel's Miscellany to the death of Spenser (1557–1599).
2 Gr., 9 Se., 5 Ju., 6 So., 1 Fr., 3 Sp. Total 26.

7*a* [1]*hf*. Dr. GREENOUGH and Mr. W. R. CASTLE, Jr. — English Literature of the Period of Queen Anne. From the death of Dryden to the death of Swift (1700–1745).
6 Gr., 13 Se., 23 Ju., 19 So., 5 Fr., 2 Sp., 2 Sc. Total 70.

7*b* [2]*hf*. Professor BLISS PERRY. — English Literature. From the death of Swift to the Publication of the Lyrical Ballads (1745–1798).
22 Gr., 25 Se., 62 Ju., 66 So., 24 Fr., 15 Sp., 2 Sc., 1 Di. Total 217.

8*a* [1]*hf*. Professor NEILSON and Dr. HUTCHISON. — English Literature. From the publication of the Lyrical Ballads to the death of Scott (1798–1832).
18 Gr., 20 Se., 27 Ju., 26 So., 9 Fr., 4 Sp. Total 104.

8*b* [2]*hf*. Mr. COPELAND and Dr. HUTCHISON. — English Literature. From the death of Scott to the death of Tennyson (1832–1892).
6 Gr., 10 Se., 15 Ju., 24 So., 7 Fr., 7 Sp., 1 Sc. Total 70.

37 [2]*hf*. Dr. MAYNADIER. — English Literature. The Story of King Arthur.
19 Se., 27 Ju., 22 So., 2 Fr., 2 Sp. Total 72.

33 *hf*. Professor WENDELL. — English Literature. The Literary History of America. 8 Gr., 4 Se., 6 Ju., 9 So., 1 Fr., 6 Sp. Total 34.

48 [2]*hf*. Professor BRIGGS. — Browning.
10 Gr., 8 Se., 5 Ju., 3 So., 1 Fr., 1 Sp. Total 28.

Primarily for Graduates: —

19 [2]*hf*. Professor F. N. ROBINSON. — Historical English Grammar.
4 Gr. Total 4.

3*b* [2]*hf*. Professor KITTREDGE. — Anglo-Saxon. Béowulf.
21 Gr., 1 Se. Total 22.

4. Professors F. N. ROBINSON and NEILSON. — Early English. English Literature from 1200 to 1450. Mätzner's Altenglische Sprachproben.
14 Gr., 1 Se. Total 15.

14. Professor BAKER. — English Literature. The Drama from the Miracle Plays to the Closing of the Theatres. 25 Gr., 8 Se., 2 Ju., 2 Sp. Total 37.

39. Professor BAKER. — English Literature. The Drama in England from 1642 to 1900. 6 Gr., 7 Se., 6 Ju., 5 So., 3 Sp. Total 27.

49 [1]*hf*. Professor NEILSON. — Shakspere. Study of Special Topics.
8 Gr., 1 Ju., 2 So. Total 11.

COURSES OF SPECIAL STUDY.

20. The instructors in English held themselves ready to assist and advise competent Graduate Students who might propose plans of special study in the language or literature of the periods or in the topics mentioned below. Such plans, however, must in each case have met the approval of the Department.

PERIODS.

b. Professor **KITTREDGE**. — Middle English. 1 Gr. Total 1.

c. Professor **NEILSON**. — Modern English Literature. 3 Gr. Total 3.

TOPICS.

g. Professor **BAKER**. — The English Drama: its history, and its relation to Continental Drama. 2 Gr. Total 2.

h. Professor **WENDELL**. — The Literary History of America. 1 Gr. Total 1.

Public Speaking.

Primarily for Undergraduates: —

1. Messrs. **HILLS** and **WILLARD**. — Voice Cultivation. 2 Se., 4 Ju., 8 So., 12 Fr., 4 Sp. Total 30.

2 *hf*. Asst. Professor **WINTER** and Mr. **HILLS**. — Platform Speaking. 14 Se., 12 Ju., 26 So., 9 Fr., 3 Sp. Total 64.

3 *hf*. Asst. Professor **WINTER** and Mr. **HILLS**. — Masterpieces of Public Discourse. 9 Se., 6 Ju., 9 So., 4 Fr., 2 Sp. Total 30.

4 *hf*. Asst. Professor **WINTER** and Mr. **HILLS**. — Dramatic Interpretation. 1 Se., 4 Ju., 3 So., 1 Fr., 3 Sp. Total 12.

Germanic Languages and Literatures.

GERMAN.

Primarily for Undergraduates: —

A. Asst. Professor **BIERWIRTH**, assisted by Drs. **COLWELL** and **STURTEVANT**, Messrs. **BRIGGS**, **LIEDER**, and **STEWART**, and Dr. **GOEBEL**. — Elementary Course. 2 Gr., 4 Se., 5 Ju., 44 So., 235 Fr., 27 Sp., 13 Sc. Total 330.

B. Mr. W. G. **HOWARD**. — Elementary Course (counting as two courses). 2 So., 13 Fr., 6 Sp. Total 21.

C. Drs. **BOESCHE** and **STURTEVANT** — German Prose and Poetry. 5 So., 26 Fr., 4 Sp., 2 Sc. Total 37.

1*a*. Asst. Professor **WALZ** and Dr. **COLWELL**. — German Prose and Poetry. 1 Gr., 2 Se., 1 Ju., 36 So., 11 Fr., 4 Sp. Total 55.

1*b*. Drs. **STURTEVANT** and **COLWELL**. — German Prose. Subjects in History and Biography. 1 Gr., 1 Se., 5 Ju., 43 So., 12 Fr., 3 Sp. Total 65.

1*c*. Dr. **STURTEVANT**. — German Prose, narrative and descriptive. 1 Se., 3 Ju., 8 So., 7 Fr., 5 Sp., 6 Sc., 1 Bu. Total 31.

Fhf. Dr. **BOESCHE**. — Practice in speaking and writing German (first course). 2 Ju., 7 So., 5 Fr., 1 Sp., 1 Sc. Total 16.

Hhf. Dr. **GOEBEL**. — Practice in speaking and writing German (second course). 2 Se., 1 Ju., 1 So. Total 4.

2*a*. Professor **VON JAGEMANN** and Dr. **BOESCHE**. — Introduction to German Literature of the Eighteenth and Nineteenth Centuries. Lessing, Goethe, and Schiller. German Ballads and Lyrics. 1 Se., 4 Ju., 11 So., 40 Fr., 3 Sp., 1 Sc. Total 60.

2*b*. Professor H. S. White and Mr. Lieder. — Introduction to German Literature of the Eighteenth and Nineteenth Centuries. Lessing, Goethe, and Schiller. German Ballads and Lyrics.
3 Se., 18 Ju., 27 So., 32 Fr., 5 Sp. Total 85

3. Asst. Professor Bierwirth. — Schiller and his Time. Der Dreissigjährige Krieg; Wallenstein; Maria Stuart; Die Jungfrau von Orleans; Die Braut von Messina; Gedichte. 1 Se., 5 Ju., 10 So., 3 Fr., 1 Sp. Total 20.

4. Asst. Professor Walz. — Goethe and his Time. Works of the Storm and Stress Period; Autobiographical Works; Poems; Egmont; Iphigenie; Tasso; Faust. 7 Se., 22 Ju., 28 So., 5 Fr., 2 Sp. Total 64.

25 ^{1}*hf*. Professor Francke, assisted by Mr. E. H. P. Grossmann. — History of German Literature in outline.
29 Se., 30 Ju., 50 So., 7 Fr., 4 Sp., 1 Sc. Total 121.

For Undergraduates and Graduates: —

G hf. Dr. Boesche. — German Grammar and practice in writing German (advanced course). 2 Gr., 1 Se. Total 3.

6 ^{1}*hf*. Professor Kühnemann (University of Breslau). — Die Blütezeit der deutschen Literatur im achtzehnten Jahrhundert.
3 Gr., 8 Se., 3 Ju., 6 So. Total 20.

19 ^{1}*hf*. Professor Kühneman (University of Breslau). — Das deutsche Drama der Gegenwart. 3 Gr., 6 Se., 9 Ju., 6 So., 11 R. Total 35.

26*a* ^{1}*hf*. Mr. W. G. Howard. — German Literature in the first half of the Nineteenth Century. Kleist; Uhland; Heine.
2 Gr., 4 Se., 3 Ju., 1 So., 2 Sp. Total 12.

26*b* ^{2}*hf*. Mr. W. G. Howard. — German Literature in the second half of the Nineteenth Century. The Development of the Novel and the Drama.
3 Gr., 2 Se., 1 Ju., 2 So., 1 Sp. Total 9.

31. Professor H. S. White. — Heine's Life and Works.
5 Se., 7 Ju., 14 So., 1 Sp. Total 27.

8. Asst. Professor Walz. — German Literature in the Twelfth and Thirteenth Centuries. Nibelungenlied; Kudrun; Hartmann; Wolfram; Walther von der Vogelweide. Translation into modern German.
4 Gr., 4 Se., 3 Ju., 2 So.. Total 13.

Primarily for Graduates: —

‡11*a hf*. Professor Francke. — The early Romantic Movement in Germany, with special reference to the ideals of life underlying it.
4 Gr., 1 So., 2 R. Total 7.

‡12*a* ^{1}*hf*. Professor von Jagemann. — Gothic. Introduction to the study of Germanic Philology. General Introduction; Phonology.
7 Gr., 1 Se., 4 R. Total 12.

‡12*b* ^{2}*hf*. Professor von Jagemann. — Introduction to the study of Germanic Philology (continued). Morphology; Etymology. 3 Gr. Total 3.

‡15 ^{1}*hf*. Dr. Goebel. — Old High German. 3 Gr. Total 3.

‡21. Professor von Jagemann. — History of the German Language, with special study of selected topics. 2 Gr. Total 2.

16 ^{1}*hf*. Professor Kittredge. — Germanic Mythology. 1 Se. Total 1.

Seminary Courses.

‡20*a*. Professor Francke. — The Mediaeval Religious Drama. 2 Gr. Total 2.

‡20*b* ^{2}*hf*. Asst. Professor Walz. — G. A. Bürger and the poets of the Hainbund. 3 Gr., 1 So. Total 4.

‡20*c* ^{1}*hf*. Professor Kühnemann (University of Breslau). — Schiller's Wallenstein. 2 Gr., 2 R. Total 4.

Netherlandish.

For Undergraduates and Graduates: —

1 ^{1}*hf*. Dr. H. de W. Fuller. — Dutch grammar. 1 Gr., 1 So. Total 2.

Scandinavian.

For Undergraduates and Graduates: —

1 ^{1}*hf*. Professor Schofield. — Dano-Norwegian. An introduction to the study of the Danish and Norwegian languages and literatures. Practice in the spoken language. 3 Gr., 3 Se., 4 So., 1 Fr. Total 11.

Romance Languages and Literatures.

French.

Primarily for Undergraduates: —

A. Mr. Churchman, and Messrs. Allard and Baulig. — Elementary Course. 3 Gr., 1 Se., 1 Ju., 18 So., 67 Fr., 40 Sp., 2 Sc., 2 Bu. Total 134.

1*c*. Mr. Hawkins. — Reading, translation, grammar, and composition. 1 So., 3 Fr., 8 Sp., 3 Sc. Total 15.

1*b*. Asst. Professor Babbitt, Dr. M. A. Potter, and Messrs. Hawkins and Spiers. — French Prose, historical and general. Translation from French into English. 5 Ju., 22 So., 34 Fr., 16 Sp., 1 Sc. Total 78.

1*a*. Associate Professor de Sumichrast and Mr. Brun. — Reading, translation, grammar, and composition. 2 Ju., 25 So., 22 Fr., 11 Sp. Total 60.

2*c*. Asst. Professor Marcou, Dr. M. A. Potter, and Messrs. Lincoln, Baulig, Hawkins, and Post. — French Prose and Poetry. Molière; Beaumarchais; Lamartine; Victor Hugo; Alfred de Musset; Balzac; Rostand. Composition. 9 Ju., 18 So., 74 Fr., 4 Sp. Total 105.

2*a*. Asst. Professor C. H. C. Wright, and Messrs. Brun and Spiers. — French Prose and Poetry. Corneille; Racine; Molière; Victor Hugo; George Sand; Alfred de Musset; Sainte-Beuve; Rostand. Composition. 1 Gr., 2 Se., 9 Ju., 25 So., 71 Fr., 1 Sp., 1 Sc. Total 110.

3. Mr. Baulig. — French Composition (elementary course). 4 Ju., 2 So., 1 Sp. Total 7.

4 ^{1}*hf*. Mr. Brun. — French Composition (intermediate course). 2 Gr., 9 Se., 10 Ju., 13 So., 3 Fr. Total 37.

5 ^{2}*hf*. Mr. Brun. — French Composition (advanced course). 1 Gr., 1 Se., 5 Ju., 3 So., 2 Fr., 1 Sp., 2 Sc. Total 15.

For Undergraduates and Graduates: —

6*c*. Professor Grandgent. — General view of French Literature.
2 Gr., 4 Se., 4 Ju., 6 So., 1 Fr., 1 Sp. Total 18.

6. Associate Professor de Sumichrast. — General view of French Literature.
1 Gr., 6 Se., 20 Ju., 44 So., 2 Fr. Total 73.

14 ^{1}*hf*. Asst. Professor Marcou. — French Lyric Poetry from Villon and the Fifteenth Century to the present time. 1 Gr., 1 Se. Total 2.

16. Mr. Allard. — The French Drama in the Nineteenth Century.
2 Gr., 2 Se., 4 So. Total 8.

7. Associate Professor de Sumichrast. — French Literature in the Nineteenth Century. 2 Gr., 7 Se., 13 Ju., 3 So. Total 25.

9. Asst. Professor C. H. C. Wright. — French Literature in the Seventeenth Century. 4 Se., 1 Ju. Total 5.

10. Asst. Professor C. H. C. Wright. — French Literature in the Sixteenth Century. 2 Gr., 1 Se., 1 So. Total 4.

Primarily for Graduates: —

12. Professor Sheldon. — Old French Literature. The national Epic Poetry (the Chansons de geste). 1 Gr. Total 1.

ITALIAN.

Primarily for Undergraduates: —

1. Asst. Professor Ford, and Messrs. Wilkins and Post. — Elementary Course. 1 Gr., 8 Ju., 15 So., 6 Fr., 1 Sp. Total 31.

For Undergraduates and Graduates: —

5. Mr. Wilkins. — Modern Italian Literature. Prose and Poetry of the Eighteenth and Nineteenth Centuries.
1 Se., 1 Ju., 3 So., 1 Fr., 2 Sp. Total 8.

2. Asst. Professor Ford. — Italian Literature of the Fifteenth and Sixteenth Centuries. Torquato Tasso; Ariosto; Machiavelli; Benvenuto Cellini.
3 Gr., 3 Se., 1 Ju., 2 So., 1 Fr. Total 10.

10. Professor Grandgent. — The Works of Dante, particularly the Vita Nuova and the Divine Comedy. 5 Gr., 6 Se., 1 Ju., 3 So. Total 15.

SPANISH.

Primarily for Undergraduates: —

1. Dr. M. A. Potter, and Messrs. Lincoln, Hawkins, and Wilkins. — Elementary Course. 17 Ju., 34 So., 19 Fr., 3 Sp., 1 Sc. Total 74.

For Undergraduates and Graduates: —

4 *hf*. Asst. Professor Ford. — A general view of Spanish Literature.
2 Gr., 1 Se., 1 Ju., 3 So., 1 Fr., 1 Sc. Total 9.

2. Asst. Professor Marcou. — Spanish Literature of the Sixteenth and Seventeenth Centuries. Cervantes; Lope de Vega; Calderón.
3 Gr., 5 Se., 2 Ju., 4 So. Total 14.

Primarily for Graduates: —

‡8. Asst. Professor Ford. — Early Spanish. The Poem of the Cid. Spanish Literature to the Fifteenth Century. 7 Gr., 1 Se., 1 R. Total 9.

Romance Philology.

Primarily for Graduates: —

3. Professor Sheldon. — Old French. Phonology and inflections. The oldest texts. La Chanson de Roland; Chrétien de Troyes; Aucassin et Nicolette. 11 Gr. Total 11.

4. Professor Grandgent. — Provençal. Language and literature, with selections from the poetry of the troubadours. 7 Gr., 1 Instr. Total 8.

5 *hf.* Professor Grandgent. — Low Latin. 6 Gr., 2 R. Total 8.

6 ^{2}*hf.* Asst. Professor Ford. — Portuguese. Language and Literature. Old Portuguese lyric verse: Gil Vicente; Sâ de Miranda; Camões.
6 Gr., 2 Se., 1 Instr. Total 9.

Celtic.

Primarily for Graduates: —

1 ^{1}*hf.* Professor F. N. Robinson. — Old Irish. General introduction to Celtic Philology. 4 Gr. Total 4.

2 ^{2}*hf.* Professor F. N. Robinson. — Middle Irish. Lectures on the history of Irish Literature. 3 Gr. Total 3.

Slavic Languages.

For Undergraduates and Graduates: —

1*a*. Asst. Professor Wiener. — Russian. 1 Se. Total 1.

2*a*. Asst. Professor Wiener. — Polish. 1 Gr. Total 1.

4 *hf.* Asst. Professor Wiener. — Introduction to the History of Russian Literature. 3 Se., 1 Ju., 4 So., 3 Fr., 3 Sp. Total 14.

Comparative Literature.

Primarily for Undergraduates: —

1. Professor Wendell, assisted by Dr. H. de W. Fuller and Mr. Nutter. — European Literature. General Survey.
19 Se., 13 Ju., 55 So., 23 Fr., 12 Sp. Total 122.

For Undergraduates and Graduates: —

6*a* ^{1}*hf.* Professor Schofield, assisted by Dr. Webster. — The Literary History of England and the Continent from the Norman Conquest to Chaucer.
17 Gr., 16 Se., 13 Ju., 22 So., 4 Fr., 5 Sp. Total 77.

6*b* ^{2}*hf.* Professor Schofield, assisted by Dr. Webster. — The Literary History of England and the Continent from Chaucer to Elizabeth.
10 Gr., 7 Se., 27 Ju., 30 So., 6 Fr., 5 Sp., 1 Sc. Total 86.

7. Dr. M. A. Potter. — Tendencies of European Literature in the Renaissance.
4 Gr., 2 Se., 4 Ju., 4 So. Total 14.

11. Asst. Professor Babbitt. — The Romantic Movement in the Nineteenth Century. 6 Gr., 6 Se., 3 So. Total 15.

12 ^{2}*hf.* Professor Bliss Perry, assisted by Mr. Stoddard. — Types of Fiction in the Eighteenth and Nineteenth Centuries.
11 Gr., 44 Se., 49 Ju., 51 So., 1 Fr., 9 Sp., 1 Sc. Total 166.

8 ^{2}*hf*. Professor Francke. — Goethe's Faust; with a study of kindred dramas in European Literature. 3 Gr., 4 Se., 3 Ju., 2 So., 1 Fr. Total 13.

13 ^{2}*hf*. Professor Schofield. — Danish and Norwegian Dramatists (especially Holberg, Oehlenschläger, Björnson, and Ibsen) and their relations to European Literature. 2 Gr., 1 Se., 2 So., 1 Fr. Total 6.

Primarily for Graduates: —

14. Professor Sheldon. — Mediaeval Literature in the vulgar tongues, with special reference to the influence of France and Provence. 4 Gr. Total 4.

22. Asst. Professor Babbitt. — Literary Criticism since the Sixteenth Century. 4 Gr., 1 Se., 1 Ju., 2 So. Total 8.

26 ^{1}*hf*. Professor Kittredge. — The Early English Metrical Romances. 6 Gr. Total 6.

29 ^{2}*hf*. Dr. H. de W. Fuller. — Netherlandish Literature and its relations to European Literature in other Tongues. 1 Gr., 1 So. Total 2.

Courses of Special Study.

20. Professor Schofield. — Opportunities were afforded to competent Graduate Students, under the guidance of instructors, for original investigation in special topics.

20*e*. Professor F. N. Robinson. — The Relations of Irish and Welsh Literatures to European Literature in other Tongues. 1 Gr. Total 1.

20*g*. Professor Grandgent. — The Relations of Provençal Literature to European Literature in other Tongues. 1 Gr. Total 1.

20*h*. Asst. Professor Ford. — The Relations of Spanish Literature to European Literature in other Tongues. 1 Gr. Total 1.

History and Political Science.

History.

Primarily for Undergraduates: —

1*a*. Professor Haskins, assisted by Messrs. Ogg, Gray, Read, and Morris. — Mediaeval History (introductory course). 1 Ju., 37 So., 230 Fr., 33 Sp., 2 Sc. Total 303.

27. Dr. Merriman. — History of Western Europe from the close of the Middle Ages to 1715. 3 Se., 2 Ju., 51 So., 5 Fr., 2 Sp. Total 63.

For Undergraduates and Graduates: —

3. Professor Haskins. — History of Rome to the reign of Diocletian. 4 Gr., 7 Se., 8 Ju., 5 So., 1 Fr. Total 25.

8. Professor Gross. — History of France to the reign of Francis I. 4 Gr., 2 Se., 3 Ju., 6 So. Total 15.

29. Dr. Merriman. — History of Spain. 7 Gr., 2 Se., 2 Ju., 3 So., 1 Sp. Total 15.

9. Professor Gross. — Constitutional History of England to the Sixteenth Century. 16 Gr., 11 Se., 23 Ju., 8 So., 1 Sp. Total 59.

12*a* ^{1}*hf*. Professor Macvane, assisted by Mr. Thompson. — English History from the Revolution of 1688 to the Reform of Parliament. 11 Gr., 33 Se., 38 Ju., 34 So., 5 Fr., 5 Sp. Total 126.

12*b* ²*hf*. Professor **Macvane**, assisted by Mr. **Thompson**. — English History since the Reform of Parliament.
11 Gr., 25 Se., 40 Ju., 31 So., 4 Fr., 3 Sp., 1 Di. Total 115.

16*a* ¹*hf*. Professor **Macvane**, assisted by Dr. **Andrews**. — History of Continental Europe from the Peace of Utrecht to the Fall of Napoleon I.
3 Gr., 16 Se., 43 Ju., 60 So., 5 Fr., 4 Sp., 1 Med. Total 132.

16*b* ²*hf*. Professor **Macvane**, assisted by Dr. **Andrews**. — History of Continental Europe since the Fall of Napoleon I.
3 Gr., 11 Se., 36 Ju., 52 So., 6 Fr., 5 Sp. Total 113.

28. Mr. R. M. **Johnston**. — History of the Rise of Prussia from the Great Elector to the present day. 3 Gr., 4 Se., 5 Ju., 3 So. Total 15.

32 ¹*hf*. Mr. R. M. **Johnston**. — European and American Warfare of the Nineteenth Century. 10 Se., 8 Ju., 4 So. Total 22.

10. Professor **Channing**, assisted by Dr. R. G. **Usher**. — American History to 1783. 1 Gr., 5 Se., 13 Ju., 31 So., 2 Fr., 3 Sp. Total 55.

13. Professor A. B. **Hart**, assisted by Messrs. **Bishop** and **Plaisted**. — Constitutional and Political History of the United States (1783–1865).
4 Gr., 10 Se., 56 Ju., 28 So., 1 Fr., 5 Sp. Total 104.

Primarily for Graduates: —

‡21. Professor **Haskins**. — Introduction to the Sources of Mediaeval History.
6 Gr., 1 Se., 1 Ju. Total 8.

34 ¹*hf*. Professor **Platner** (Andover Theological Seminary). — Christian Institutions, historically and comparatively considered. 7 Di. Total 7.

24 ¹*hf*. Professor E. C. **Moore**. — The Church since the Reformation.
15 Se., 9 Ju., 15 So., 2 Sp., 4 Di. Total 45.

23*a* ¹*hf*. Professor **Channing**. — Selected Topics in the historical development of American Institutions. English Colonial Administration and Administrators, 1689–1760. 10 Gr. Total 10.

23*b* ²*hf*. Professor **Channing**. — Selected Topics in the historical development of American Institutions. American History, 1689–1760. 9 Gr. Total 9.

Courses of Research.

20*b*. Professor **Gross**. — English Institutions in the Middle Ages.
5 Gr. Total 5.

20*c*. Professor **Haskins**. — Institutions of Continental Europe in the Middle Ages. 1 Gr. Total 1.

20*e*. Professor **Channing**. — American History. 2 Gr., 1 Ju. Total 3.

20*f*. Dr. **Merriman**. — English Institutions in the Tudor and Stuart Periods.
1 Gr. Total 1.

20*h*. Mr. R. M. **Johnston**. — History of France and Italy during the period of Napoleon and the Risorgimento. 1 So. Total 1.

GOVERNMENT.

Primarily for Undergraduates: —

1. Professor **Lowell** and Asst. Professor **Munro**, assisted by Messrs. **Lunt**, **Catlett**, **Rice**, **Neagle**, and **Kelley**. — Constitutional Government (elementary course). 3 Ju., 104 So., 241 Fr., 33 Sp., 2 Sc. Total 383.

For Undergraduates and Graduates: —

4 ²*hf.* Professor G. G. **Wilson** (Brown University). — Elements of International Law. 4 Gr., 13 Se., 12 Ju., 11 So., 1 Fr., 1 Sp. Total 42.

6 ²*hf.* Asst. Professor **Munro**. — History of Political Theories. 1 Gr., 2 Se., 2 Ju., 6 So., 1 Sp. Total 12.

13 ²*hf.* Mr. R. M. **Johnston**. — European Diplomacy since 1814. 4 Gr., 3 Ju., 2 So. Total 9.

17. Asst. Professor **Munro**, assisted by Mr. **Neagle**. — Modern Municipal Government. 4 Gr., 17 Se., 28 Ju., 29 So., 2 Sp. Total 80.

21. Mr. E. M. **Parker**. — Comparative Administration and Administrative Law. 4 Gr., 4 Ju., 1 Sp. Total 9.

Primarily for Graduates: —

10 ²*hf.* Professor **Lowell**. — Modern English Government. A study of the existing system of national government, and of the working of political parties. 4 Gr., 2 Se., 1 Ju., 5 So. Total 12.

‡12. Professor A. B. **Hart**. — The American Political System, national, state, and municipal. 14 Gr., 4 Se., 4 Ju., 1 So., 2 Sp., 5 R. Total 30.

19. Professor **Stimson**. — American Constitutional Law. A study of constitutional principles and limitations throughout the United States. 11 Gr., 16 Se., 12 Ju., 6 So., 2 Sp. Total 47.

COURSES OF RESEARCH.

20*e*. Professor A. B. **Hart** and Asst. Professor **Munro**. — American Institutions. 8 Gr., 1 Ju. Total 9.

20*f*. Professor **Stimson**. — Constitutional Protection to Private Rights. 1 Gr., 1 Ju., 1 So. Total 3.

Economics.

Primarily for Undergraduates: —

1. Professor **Taussig** and Asst. Professors **Bullock** and **Andrew**, assisted by Messrs. **Martin**, **Mason**, G. R. **Lewis**, **Huse**, and **Holcombe**. — Principles of Economics. 1 Gr., 15 Se., 43 Ju., 252 So., 50 Fr., 26 Sp., 3 Sc., 2 Bu. Total 392.

For Undergraduates and Graduates: —

2. Professor **Taussig**. — Principles of Economics (second course). 12 Gr., 6 Se., 9 Ju., 2 So., 2 Sp., 2 Di. Total 33.

3. Mr. J. A. **Field**. — Principles of Sociology. Theories of Social Progress. 4 Gr., 9 Se., 16 Ju., 11 So., 3 Sp., 1 Di. Total 44.

4. Professor **Ripley**. — Statistics. Theory, method, and practice. 5 Gr., 3 Se., 2 Ju., 3 So. Total 13.

5 ^{1}*hf*. Professor Ripley, assisted by Dr. Daggett and Mr. W. W. McLaren. — Economics of Transportation.
7 Gr., 59 Se., 100 Ju., 31 So., 2 Fr., 4 Sp., 2 Sc. Total 205

6*a* ^{1}*hf*. Professor Gay. — European Industry and Commerce in the Nineteenth Century. 17 Gr., 20 Se., 21 Ju., 12 So., 2 Sp., 1 Sc. Total 73.

6*b* ^{2}*hf*. Professor Gay. — Economic and Financial History of the United States.
20 Gr., 13 Se., 44 Ju., 25 So., 2 Fr., 5 Sp., 1 Sc., 2 Di. Total 112.

8*a* ^{1}*hf*. Asst. Professor Andrew. — Money. A general survey of currency legislation, experience, and theory in recent times.
4 Gr., 12 Se., 22 Ju., 10 So., 1 Sp., 1 Law. Total 50.

8*b* ^{2}*hf*. Asst. Professor Andrew. — Banking and Foreign Exchange.
3 Gr., 10 Se., 32 Ju., 30 So., 2 Fr., 5 Sp. Total 82.

9*a* ^{1}*hf*. Professor Ripley, assisted by Mr. E. deT. Bechtel. — Problems of Labor. 8 Gr., 35 Se., 33 Ju., 18 So., 4 Sp., 2 Di. Total 100.

9*b* ^{2}*hf*. Professor Ripley, assisted by Dr. Daggett. — Economics of Corporations.
10 Gr., 1 G. S., 70 Se., 103 Ju., 40 So., 1 Fr., 8 Sp., 1 Sc., 2 Di. Total 236.

11. Professor Gay. — Modern Economic History of Europe.
8 Gr., 4 Se., 4 Ju., 6 So., 2 Sp., 1 Di. Total 25.

12 ^{1}*hf*. Asst. Professor Andrew. — Commercial Crises and Cycles of Trade.
4 Gr., 11 Se., 9 Ju., 2 So. Total 26.

14*a* ^{1}*hf*. Professor Fetter (Cornell University). — The Distribution of Wealth.
5 Gr., 12 Se., 9 Ju., 4 So., 1 Sp., 1 Di., 1 Law. Total 33.

14*b* ^{1}*hf*. Professor Fetter (Cornell University). — Methods of Social Reform. Socialism, Communism, the Single Tax, etc.
4 Gr., 8 Se., 10 Ju., 3 So., 6 Di., 1 Law. Total 32.

16*a* ^{1}*hf*. Asst. Professor Bullock. — Introduction to Public Finance.
4 Se., 7 Ju., 3 So., 1 Sp. Total 15.

16*b* ^{2}*hf*. Asst. Professor Bullock. — The Theory and Methods of Taxation.
3 Gr., 4 Se., 9 Ju., 5 So., 1 Sp. Total 22.

17 ^{2}*hf*. Dr. Daggett. — Railroad Practice.
4 Gr., 14 Se., 12 Ju., 5 So., 2 Sp. Total 37.

18. Mr. W. M. Cole. — Principles of Accounting.
7 Gr., 50 Se., 21 Ju., 8 So., 3 Sp., 1 Law. Total 90.

21. Asst. Professor Wyman. — Principles of Law governing Industrial Relations and Commercial Law.
6 Gr., 83 Se., 43 Ju., 14 So., 5 Sp., 1 Sc. Total 152.

Primarily for Graduates: —

‡15. Asst. Professor Bullock. — History and Literature of Economics to the year 1848. 7 Gr., 1 Ju. Total 8.

‡22. Professor Gay. — German and French Economists of the Nineteenth Century. 3 Gr. Total 3.

COURSES OF RESEARCH.

20*a*. Professor GAY. — Selected Topics in English Economic History.
4 Gr Total 4.

‡20*d*. Professor TAUSSIG. — Selected Topics in the Tariff History of the United States. 3 Gr., 1 So. Total 4.

THE SEMINARY IN ECONOMICS.

20. Competent students were guided in investigation, undertaken independently or in connection with courses primarily for graduates; and the results were presented for discussion. 4 Gr. Total 4.

History of Religions.

For Undergraduates and Graduates: —

1 ¹*hf*. Professor G. F. MOORE. — Introduction to the Study of Religions.
3 Gr., 4 Se., 3 Ju., 1 So., 1 Sp., 1 Sc., 9 Di. Total 22.

2. Professor G. F. MOORE. — History of Religions in Outline. The Religions of China and Japan, Egypt, Babylonia and Assyria, and the Western Semites (including Judaism and Mohammedanism). The Religions of India, Persia, the Greeks, Romans, Germans, and Celts; Christianity.
3 Gr., 12 Se., 10 Ju., 11 So., 3 Sp., 7 Di., 1 Me. Total 47.

Philosophy.

Primarily for Undergraduates: —

A ¹*hf*. Professor PALMER. — History of Ancient Philosophy.
2 Gr., 6 Se., 27 Ju., 53 So., 30 Fr., 4 Sp., 2 Sc. Total 124.

B ²*hf*. Professor PALMER. — History of Modern Philosophy.
1 Gr., 9 Se., 25 Ju., 77 So., 45 Fr., 11 Sp., 2 Sc. Total 170.

C ¹*hf*. Professor ROYCE. — Logic.
2 Se., 18 Ju., 34 So., 19 Fr., 6 Sp., 1 Sc. Total 80.

D ¹*hf*. Professor JAMES. — General Problems of Philosophy.
1 Gr., 4 Se., 47 Ju., 49 So., 17 Fr., 13 Sp., 1 Di., 1 Law. Total 133.

E ²*hf*. Professor MÜNSTERBERG. — Psychology.
1 Gr., 7 Se., 41 Ju., 91 So., 60 Fr., 13 Sp., 1 Sc., 1 Di., 1 Law. Total 216.

For Undergraduates and Graduates: —

2 ¹*hf*. Asst. Professor HOLT. — Advanced Psychology.
2 Gr., 3 Se., 1 Ju., 1 So. Total 7.

13*a* ¹*hf*. Dr. YERKES. — Comparative Psychology. Mental Development in the Race. 2 Gr., 5 Se., 2 Ju., 7 So. Total 16.

13*b* ²*hf*. Dr. YERKES. — Comparative Psychology. Mental Development in the Individual. 3 Gr., 2 Se., 3 Ju., 6 So., 1 Di. Total 15.

14 ²*hf*. Asst. Professor HOLT. — Experimental Psychology (elementary laboratory course). 2 Gr., 1 Se., 1 Sp. Total 4.

3. Asst. Professor R. B. PERRY. — Philosophy of Nature, with special reference to Man's Place in Nature Fundamental Conceptions of Natural Science, and their relation to Ethical and Religious Truth.
2 Gr., 1 Se., 1 So., 2 Di. Total 6.

4. Asst. Professor R. B. **Perry**. — Ethics. The Theory of Morals, considered constructively. 5 Gr., 3 Se., 1 Ju., 1 So., 4 Di. Total 14.

9. Professor **Royce**. — Metaphysics. The Fundamental Problems of Theoretical Philosophy. The Nature of Reality; Monism and Pluralism; Freedom, Teleology, and Theism. 5 Gr., 3 Se., 1 Ju., 3 So., 5 Di. Total 17.

15. Professor **Royce**. — Theory of Knowledge. The Processes of Conception, Judgment, and Reasoning. The Relations of Thought and Reality. The Elements of Symbolic Logic. 2 Gr., 1 Se. Total 3.

18. Dr. **Woods**. — Philosophical Systems of India, with special reference to Vedanta, Sankhya, and Yoga. 1 Gr., 2 Ju., 2 Di. Total 5.

12. Asst. Professor **Santayana**. — Greek Philosophy, with special reference to Plato. 2 Gr., 13 Se., 6 Ju., 7 So., 1 Di. Total 29.

11*a* 1*hf*. Dr. **Woods**. — Descartes, Spinoza, and Leibnitz.
2 Gr., 4 Se., 2 Ju., 2 So. Total 10.

11*b* 2*hf*. Dr. **Woods**. — English Philosophy from Locke to Hume.
3 Gr., 3 Se., 1 Ju., 3 So., 2 Sp., 1 Di. Total 13.

8 1*hf*. Professor **Palmer**. — The Kantian Philosophy.
4 Gr., 5 Se., 3 So., 1 Di. Total 13.

10. Asst. Professor **Santayana**. — Philosophy of History.
4 Gr., 10 Se., 5 Ju., 5 So., 1 Sp., 1 Law, 1 Di. Total 27.

16 1*hf*. Professor **Fenn**. — Theism. 1 Gr., 1 Ju., 9 Di. Total 11.

17 1*hf*. Professor E. C. **Moore**. — History of Christian Thought since Kant.
2 Gr., 2 Se., 1 So., 1 Sp., 8 Di. Total 14.

Courses of Special Study.

Primarily for Graduates: —

‡20*a*. Professor **Münsterberg**, Asst. Professor **Holt**, and Dr. **Yerkes**. — Psychological Laboratory. Experimental investigations.
10 Gr., 1 Se., 2 R. Total 13.

20*b*. Professor **Münsterberg**. — Psychological Seminary. Mind and Body.
12 Gr., 2 Se., 2 Di. Total 16.

‡20*c*. Professor **Royce**. — Logical Seminary. Hegel's Phenomenology.
7 Gr., 2 Di. Total 9.

‡20*d*. Professor **Palmer**. — Ethical Seminary. The Systematization of Ethics.
6 Gr., 1 Se., 2 R. Total 9.

20*e*. Asst. Professor **Santayana**. — Historical Seminary. History of Philosophy in the Middle Ages. 3 Gr., 1 Se. Total 4.

20*f*. Professor **Royce**. — Seminary on the Aims and Methods of the Teaching and Study of Philosophy. 3 Gr. Total 3.

Social Ethics.

For Undergraduates and Graduates: —

1. Professor **Peabody** and Dr. **Rogers**. — Social Ethics. The problems of Poor-Relief, the Family, Temperance, and various phases of the Labor Question, in the light of ethical theory.
6 Gr., 41 Se., 54 Ju., 50 So., 1 Fr., 11 Sp., 12 Di. Total 175.

2 ^{2}*hf.* Dr. **Brackett.** — Social Ethics. Practical Problems of Public Aid, Charity, and Neighborhood Work.
2 Gr., 3 Se., 4 Ju., 5 So., 9 Di. Total 23.

3 ^{1}*hf.* Dr. **Rogers.** — Criminology and Penology.
31 Se., 16 Ju., 17 So., 5 Sp. Total 69.

Primarily for Graduates: —

COURSES OF RESEARCH.

‡20*a*. Professor **Peabody.** — Seminary of Social Ethics. Christian Ethics and Modern Life. 3 Gr., 17 Di., 1 R. Total 21.

‡20*b*. Professor **Peabody** directed special research in the Ethics of the Social Questions. 1 Gr., 1 Se., 2 Di., 1 R. Total 5.

20*c*. Dr. **Brackett.** — The School for Social Workers.
2 Gr., 1 So., 3 Sp., 1 Di. Total 7.

Education.

For Undergraduates and Graduates: —

1. Asst. Professor A. O. **Norton.** — History of Educational Practices and Theories. 11 Gr., 5 Se., 3 Ju., 3 So., 6 Sp., 5 Sc. Total 33.

2*a* ^{1}*hf.* Professor **Hanus.** — Introduction to the Study of Education. Discussion of Educational Principles.
10 Gr., 11 Se., 3 Ju., 4 So., 5 Sp., 3 Sc., 1 Bu. Total 37.

2*b* ^{2}*hf.* Professor **Hanus.** — School Administration as a Branch of Municipal Affairs, more particularly in Massachusetts. Contemporary Tendencies and Problems. 3 Se., 4 So., 3 Sp., 1 Sc. Total 11.

5 ^{1}*hf.* Asst. Professor A. O. **Norton.** — Education of the Individual. Critical and historical study of modern views. 9 Gr., 1 Ju., 2 Sp., 5 Sc. Total 17

Primarily for Graduates: —

‡3. Professor **Hanus** and Asst. Professor A. O. **Norton.** — Organization and Management of Public Schools and Academies. Supervision, Courses of Study, and Teaching.
16 Gr., 5 Se., 1 Ju., 2 Sp., 1 Sc., 1 Bu., 6 R. Total 32.

‡10*a* ^{2}*hf.* Associate Professor C. P. **Parker.** — Methods and Equipment of a teacher of Classics in secondary schools. 1 Gr., 1 Sp. Total 2.

SEMINARY COURSES.

‡20*a*. Professor **Hanus.** — Seminary. Contemporary Problems in Education.
19 Gr. Total 19.

‡20*b*. Asst. Professor A. O. **Norton.** — Seminary in the History of Education.
5 Gr. Total 5.

The Fine Arts.

Primarily for Undergraduates: —

1. Professor **Charles** H. **Moore**, assisted by Messrs. **Mower** and **Pope.** — Principles of Delineation, Color, and Chiaroscuro, with some consideration of historic forms of Art, and the conditions which have influenced them.
1 G. S., 7 Ju., 31 So., 42 Fr., 5 Sp. Total 86.

For Undergraduates and Graduates: —

2. Professor Charles H. Moore. — Principles of Design in Architecture, Sculpture, and Painting, as exemplified in the Arts of past ages.
3 Se., 3 Ju., 2 So., 1 Fr., 4 Sp. Total 13.

3. Asst. Professor Chase, assisted by Mr. Dinsmoor. — History of Ancient Art. Architecture, Sculpture, and Painting in Egypt, Assyria, and Greece, with some account of the lesser arts.
1 Gr., 13 Se., 24 Ju., 55 So., 10 Fr., 3 Sp., 1 Sc. Total 107.

4. Professor Charles H. Moore, assisted by Mr. Fitzpatrick. — The Fine Arts of the Middle Ages and the Renaissance.
1 Gr., 16 Se., 34 Ju., 9 So., 1 Sp., 1 Sc. Total 62.

5. Mr. Pope. — Landscape Painting: its history and principles, with special reference to the works of Turner.
1 G.S., 3 Se., 3 Ju., 6 So., 2 Sp., 1 Sc. Total 16.

Architecture.

Of the courses in Architecture, only Courses 1a, 1b, 1c, 2a, 2b, 3a, 3b, 4a, 7a, 7b may be counted towards the degree of A.B.

For Undergraduates and Graduates: —

1*a*. Professor H. L. Warren, assisted by Messrs. Swan and Skene. — Technical and Historical Development of the Ancient Styles, with special reference to Classic Architecture.
1 G. S., 2 Se., 3 Ju., 6 So., 6 Fr., 4 Sp. Total 22.

1*b*. Professor H. L. Warren, assisted by Mr. Skene. — Technical and Historical Development of the Mediaeval Styles of Architecture.
3 G. S., 3 Se., 10 Ju., 5 So., 7 Sp., 7 Sc. Total 35.

2*a*. Mr. Swan and Mr. Jenney, assisted by Mr. Skene. — Elementary Architectural Drawing. Elements of Architectural Form. The Orders.
2 G. S., 2 Se., 5 Ju., 2 So., 4 Fr., 4 Sp. Total 19.

2*b*. Asst. Professor Mowll. — Stereotomy, Shades and Shadows, and Perspective. 1 Gr., 6 G.S., 1 Ju., 2 So., 3 Sp., 2 Sc. Total 15.

3*a*. Asst. Professor Mowll and Mr. Swan. — Freehand Drawing.
2 G. S., 4 Se., 7 Ju., 8 So., 9 Sp., 8 Sc. Total 38.

3*b*. Mr. H. B. Warren, assisted by Mr. Skene. — Freehand Drawing (second course). Mr. Murphy. — Drawing from the Life.
1 Gr., 4 G.S., 1 Se., 2 Ju., 1 So., 3 Sp., 4 Sc. Total 16.

3*c*. Mr. H. B. Warren. — Freehand Drawing (third course). Mr. Murphy. — Drawing from the Life. 4 G. S., 4 Sc. Total 8.

4*a*. Asst. Professor Mowll and Mr. Swan; with lectures on the Principles of Design in Architecture, and occasional criticism, by Professor H. L. Warren. — Elementary Architectural Design.
2 G. S., 3 Se., 2 Ju., 2 So., 5 Sp., 4 Sc. Total 18.

4*b*. Professor H. L. Warren and Asst. Professor Mowll. — Architectural Design (second course). 1 Gr., 3 G. S., 1 Se., 1 So., 3 Sp., 2 Sc. Total 11.

5 ²hf. Mr. JENNEY. — Elements of Construction; Materials and Methods.
3 G. S., 1 Se., 4 Ju., 2 So., 3 Sp., 4 Sc. Total 17.

6 hf. Mr. GARBUTT. — Modelling. 3 G. S., 1 Sp., 6 Sc. Total 10.

7a ¹hf. Dr. ROSS and Mr. E. O. PARKER. — Theory of Pure Design, Harmony, Rhythm, and Balance.
1 Gr., 5 Se., 6 Ju., 3 So., 1 Fr., 3 Sp., 2 Sc. Total 21.

Primarily for Graduates: —

8d. Messrs. H. B. WARREN and MURPHY. — Freehand Drawing (fourth course).
1 Gr., 3 Sc. Total 4.

4c. Professor H. L. WARREN and Asst. Professor MOWLL, with the coöperation, successively, of Messrs. WHEELWRIGHT, C. A. COOLIDGE, STURGIS, and DAY. — Architectural Design (third course).
3 G. S., 1 Se., 7 Sc. Total 11.

4d. Professor H. L. WARREN and Asst. Professor MOWLL, and, successively, Messrs. WHEELWRIGHT, C. A. COOLIDGE, STURGIS, and DAY. — Architectural Design (advanced course). 1 Gr. Total 1.

7b ¹hf. Dr. ROSS. — Theory of Tone-Relations: Values, Colors, and Intensities of Color. Applications of the Theory in Pure Design and in Representation. 4 Se., 2 Ju., 2 Fr., 1 Sp. Total 9.

COURSES OF SPECIAL STUDY.

20a. Professor H. L. WARREN. — Competent students who satisfied the instructor of their fitness to pursue advanced work were directed in the study of special periods in the history of architecture.
2 G. S., 1 Se., 4 Sc. Total 7.

20b ¹hf. Dr. ROSS. — Advanced Practice in Pure Design or in Representation.
1 G. S., 1 Se., 1 Sp. Total 3.

Landscape Architecture.

For Undergraduates and Graduates: —

1. Asst. Professor PRAY, with occasional lectures by Professor OLMSTED. — Principles of Landscape Architecture.
1 G. S., 9 Se., 18 Ju., 26 So., 6 Sp., 3 Sc. Total 63.

2. Asst. Professor PRAY and Mr. HUBBARD. — Practice in Design (first course).
1 G. S., 1 Se., 1 Sp., 4 Sc. Total 7.

3. Professor OLMSTED and Asst. Professor PRAY. — Practice in Design (second course). 1 G. S., 2 Sc. Total 3.

4. Mr. HUBBARD. — Details of Construction.
2 G. S., 2 Se., 1 So., 2 Sp., 3 Sc. Total 10.

Music.

For Undergraduates and Graduates: —

1. Asst. Professor SPALDING and Messrs. HEILMAN and HURLIN. — Harmony.
2 Se., 7 Ju., 5 So., 18 Fr., 1 Sp. Total 33.

2. Mr. HEILMAN. — Counterpoint. 1 Gr., 3 Se., 1 Ju., 4 So., 2 Fr. Total 11.

2a hf. Asst. Professor SPALDING. — Vocal Counterpoint, with analysis of choral works of the great composers. 2 Se., 3 Ju., 1 So., 1 Sp. Total 7.

3. Asst. Professor SPALDING. — History of Music from the time of Palestrina to the present day.
8 Se., 14 Ju., 28 So., 16 Fr., 2 Sp., 1 Sc., 1 Di. Total 70.

4. Asst. Professor SPALDING and Mr. HEILMAN. — Musical Form, with analysis of the works of the great composers.
1 Gr., 4 Se., 4 Ju., 4 So., 1 Fr., 1 Sp. Total 15.

5. Asst. Professor SPALDING. — Canon and Fugue.
2 Gr., 3 Ju., 4 So., 2 Fr., 2 Sp., 1 R. Total 14.

Primarily for Graduates: —

‡6. Asst. Professor SPALDING. — Instrumentation.
2 Gr., 5 Se., 5 So., 1 Sp., 4 R. Total 17.

‡7. Asst. Professor CONVERSE. — Free Composition.
5 Se., 1 So., 2 Sp., 1 R. Total 9.

Mathematics.

Primarily for Undergraduates: —

F. Asst. Professor BOUTON and Dr. COOLIDGE. — Trigonometry and Plane Analytic Geometry.
1 G. S., 4 Se., 8 Ju., 10 So., 46 Fr., 5 Sp. Total 74.

A ¹*hf.* Mr. EVANS. — Logarithms; Plane and Spherical Trigonometry.
1 Ju., 7 So., 15 Fr., 2 Sp. Total 25.

C. Professor BÔCHER. — Plane and Solid Analytic Geometry (extended course).
2 Ju., 3 So., 32 Fr., 1 Sp., 2 Sc. Total 40.

D ²*hf.* Asst. Professor WHITTEMORE. — Algebra.
1 Ju., 9 So., 30 Fr., 2 Sp. Total 42.

E ¹*hf.* Asst. Professors BOUTON and WHITTEMORE, and Dr. COOLIDGE. — Solid Geometry. 2 Se., 3 Ju., 17 So., 39 Fr., 12 Sp., 11 Sc. Total 84.

G ²*hf.* Asst. Professor BOUTON. — Descriptive Geometry.
1 Gr., 2 Se., 2 Ju., 4 So., 4 Fr., 1 Sc. Total 14.

2. Professor BYERLY. — Differential and Integral Calculus (first course).
2 Gr., 8 Se., 21 Ju., 30 So., 2 Fr., 2 Sp., 3 Sc. Total 68.

4. Professor OSGOOD. — The Elements of Mechanics.
6 Gr., 3 Se., 11 Ju., 2 So., 1 Sp., 3 Sc. Total 26.

For Undergraduates and Graduates: —

3. Dr. COOLIDGE. — Introduction to Modern Geometry and Modern Algebra.
7 Gr., 2 Ju., 6 So. Total 15.

5. Professor OSGOOD. — Differential and Integral Calculus (second course).
8 Gr., 2 Se., 6 Ju., 1 Sp., 1 Sc. Total 18.

12 ¹*hf.* Professor OSGOOD. — Infinite Series and Products.
7 Gr. Total 7.

14*b* ²*hf.* Professor OSGOOD. — Algebra. Galois's Theory of Equations.
4 Gr., 1 Se. Total 5.

24 ²*hf*. Professor BÔCHER. — The Theory of Numbers. 3 Gr., 1 Se., 4 Ju. Total 8.

8. Professor BYERLY. — Dynamics of a Rigid Body. 4 Gr., 2 Se. Total 6.

Primarily for Graduates: —

‡13. Asst. Professor WHITTEMORE. — The Theory of Functions (introductory course). 6 Gr., 1 Se. Total 7.

‡22 ¹*hf*. Asst. Professor WHITTEMORE. — Introduction to the Differential Geometry of Curves and Surfaces. 5 Gr., 1 R. Total 6.

‡26. Dr. COOLIDGE. — Line Geometry. 1 Gr., 1 Se., 1 R. Total 3.

‡21 ¹*hf*. Professor BÔCHER. — Methods of Interpolation and Approximation. 4 Gr., 2 Ju., 1 R. Total 7.

‡10. Professors BYERLY and B. O. PEIRCE. — Trigonometric Series. Introduction to Spherical Harmonics. The Potential Function. 5 Gr., 1 Se., 1 R. Total 7.

‡15. Asst. Professor BOUTON. — Differential Equations, with an introduction to Lie's Theory of Continuous Groups. 5 Gr. Total 5.

‡30. Professor BÔCHER. — The Linear Differential Equations of Physics. 5 Gr., 1 Se. Total 6.

READING COURSE.

‡20*c*. Dr. COOLIDGE. — Enriques' Projective Geometry. 1 Gr. Total 1.

COURSES OF RESEARCH.

‡20*d*. Professor OSGOOD. — Topics in the Theory of Functions. 1 Gr. Total 1.

‡20*e*. Professor BÔCHER. — Fluctuating Functions. 2 Gr. Total 2.

Astronomy.

Primarily for Undergraduates: —

1 ¹*hf*. Professor WILLSON, assisted by Messrs. BRENKE, GOULD, WATSON, E. F. ADAMS, and HARBOUR. — Descriptive Astronomy. 11 Se., 13 Ju., 23 So., 5 Fr., 3 Sp., 4 Sc. Total 59.

2 ²*hf*. Professor WILLSON. — Practical Astronomy. Application of Astronomy to Navigation and Exploration. 2 Se., 4 Ju., 7 So. Total 13.

For Undergraduates and Graduates: —

3. Professor WILLSON. — Practical Astronomy. Portable and fixed instruments. 3 Gr., 1 Se., 2 Ju. Total 6.

Primarily for Graduates: —

5. Professor WILLSON. — Practical Astronomy. Instruments of the fixed observatory. 2 Gr. Total 2.

Physics.

Primarily for Undergraduates: —

B. Professor HALL, Dr. G. W. PIERCE, and Mr. J. M. ADAMS. — Elementary Course. 1 Gr., 1 Se., 2 Ju., 18 So., 35 Fr., 22 Sp., 3 Sc. Total 82.

C. Professor Sabine, Drs. Pierce, Lyman, and H. W. Morse, and Mr. L. D. Hill. — Experimental Physics. Mechanics, Sound, Light, Magnetism, and Electricity.
3 Gr., 1 G. S., 5 Se., 22 Ju., 35 So., 52 Fr., 30 Sp., 42 Sc. Total 190.

1. Professor Hall and Mr. Serviss. — General Descriptive Physics.
2 Se., 2 Ju., 5 So., 5 Fr., 2 Sp., 2 Sc. Total 18.

11 ^{1}*hf*. Dr. H. W. Morse. — The Theory of Primary and Secondary Batteries.
3 Se., 4 So., 2 Sc. Total 9.

For Undergraduates and Graduates : —

2. Professor Sabine. — Light. 2 Gr., 3 Se., 1 So., 1 Sc. Total 7.

3. Professor B. O. Peirce and Dr. H. N. Davis. — Electrostatics, Electrokinematics, and parts of Electromagnetism.
1 G. S., 2 Se., 12 Ju., 4 So., 12 Sc. Total 31.

12 ^{1}*hf*. Dr. Lyman. — Radioactivity and Electric Conduction in Gases with special reference to the Theory of Ions.
3 Gr., 2 Se., 5 Ju., 4 So., 3 Sc. Total 17.

17 ^{2}*hf*. Dr. G. W. Pierce. — Electric Waves and their Application to Wireless Telegraphy. 3 Gr., 2 Se., 10 Ju., 3 Sc. Total 18.

4. Professor Trowbridge, Dr. G. W. Pierce, and Dr. Lyman. — Magnetism, Electromagnetism, and Electrodynamics.
1 Gr., 1 G. S., 3 Se., 1 Sp., 12 Sc. Total 18.

6*a* ^{1}*hf*. Professor Hall. — Elements of Thermodynamics.
5 Se., 3 Ju., 2 Sc. Total 10.

6*b* ^{2}*hf*. Professor Hall. — Modern Developments and Applications of Thermodynamics. 3 Se., 1 Ju., 1 Sc. Total 5.

14 ^{2}*hf*. Dr. H. W. Morse. — The Theory of Photography.
1 Gr., 3 Se., 2 Ju., 3 Sc. Total 9.

15 ^{1}*hf*. Dr. G. W. Pierce. — Radiation. 1 Gr., 3 Se., 2 Ju., 1 Sc. Total 7.

Primarily for Graduates : —

‡7 *hf*. Professor Hall. — The Theory of Probability and the Kinetic Theory of Gases. 2 Se. Total 2.

‡9. Professor B. O. Peirce. — The Mathematical Theory of Electricity and Magnetism. 3 Gr., 1 Se. Total 4.

Courses of Research.

20*b*. Professor B. O. Peirce. — Electricity and Magnetism. 1 Gr. Total 1.

20*c*. Professor Hall. — Heat and Electricity. 1 Gr. Total 1.

20*d*. Professor Sabine. — Light and Heat. 3 Gr. Total 3.

20*e*. Dr. G. W. Pierce. — Radiation and Electromagnetic Waves.
1 Gr., 1 Se. Total 2.

20*g*. Dr. Lyman. — Light of Short Wave Lengths. 1 Gr. Total 1.

Chemistry.

Primarily for Undergraduates: —

1. Professor C. L. Jackson, Dr. L. Clarke, Mr. Carleton, and seven assistants. — Descriptive Inorganic Chemistry.
2 Gr., 5 Se., 18 Ju., 54 So., 135 Fr., 59 Sp., 25 Sc. Total 298.

2 ^{1}*hf.* Asst. Professor Torrey and Mr. Zanetti. — Organic Chemistry (elementary course).
2 Gr., 18 Se., 30 Ju., 33 So., 6 Fr., 7 Sp., 8 Sc., 1 Bu. Total 100.

3. Professor Sanger, Mr. Chapin, and four assistants. — Qualitative Analysis.
6 Gr., 8 Se., 25 Ju., 40 So., 17 Sp., 13 Sc. Total 109.

For Undergraduates and Graduates: —

4. Asst. Professor Baxter and Mr. Boylston. — Quantitative Analysis, gravimetric and volumetric.
7 Gr., 5 Se., 8 Ju., 9 So., 6 Sp., 4 Sc. Total 39.

8 ^{2}*hf.* Asst. Professors Torrey and Baxter. — The Historical Development of Chemical Theory. Elementary Physical Chemistry.
3 Gr., 6 Se., 17 Ju., 22 So., 3 Fr., 3 Sp., 7 Sc. Total 61.

11. Professor Walker (Mass. Institute of Technology). — Industrial Chemistry.
5 Gr., 5 Se., 6 Ju., 1 So., 7 Sc. Total 24.

9 ^{1}*hf.* Asst. Professor Baxter and Mr. Grinnell Jones. — Advanced Quantitative Analysis. 5 Gr., 3 Se., 3 Ju., 2 So., 3 Sc. Total 16.

10 ^{2}*hf.* Asst. Professor Baxter and Mr. Grinnell Jones. — Gas Analysis.
6 Gr., 3 Se., 5 Ju., 3 So., 1 Sp., 1 Sc. Total 19.

5. Asst. Professor Torrey and Mr. Kipper. — The Carbon Compounds.
9 Gr., 5 Se., 8 Ju., 5 So., 3 Sp., 4 Sc. Total 34.

5*a hf.* Asst. Professor Torrey and Mr. Kipper. — The Carbon Compounds.
8 Gr., 6 Se., 7 Ju., 4 So., 3 Sp., 4 Sc. Total 32.

15 ^{2}*hf.* Dr. Henderson. — General Biological Chemistry.
6 Gr., 11 Se., 13 Ju., 8 So., 2 Sp., 4 Sc. Total 44.

Primarily for Graduates: —

6. Professor Richards and Mr. Frevert. — Physical Chemistry.
6 Gr., 3 Se., 4 Ju., 2 Sc. Total 15.

12 ^{1}*hf.* Asst. Professor Baxter. — Photochemistry, including the use of Optical Instruments in Chemistry. 3 Gr., 1 Se., 3 Ju., 3 Sc. Total 10.

7 ^{2}*hf.* Mr. Frevert. — Electrochemistry. 3 Gr., 2 Se., 2 Ju., 1 Sc. Total 8.

16 ^{1}*hf.* Asst. Professor Torrey. — The General Reactions of Organic Chemistry. 4 Gr., 3 Se., 2 Ju., 2 Sc. Total 11.

COURSES OF RESEARCH.

20*b.* Professor C. L. Jackson. — Organic Chemistry. 3 Gr., 2 G.S. Total 5.

20*c.* Asst. Professor Torrey. — Organic Chemistry. 4 Gr., 2 Se. Total 6.

20*e.* Professor Sanger. — Applied Chemistry. 1 Gr. Total 1.

20*f.* Asst. Professor Baxter. — Inorganic Chemistry, including Determination of Atomic Weights. 12 Gr., 1 So., 2 Sc. Total 15.

Engineering.

Primarily for Undergraduates: —

1*e*. Asst. Professor Love, Messrs. Gaylord and Doyen. — Trigonometry, Algebra, and Analytic Geometry.
1 Ju., 1 So., 18 Fr., 14 Sp., 9 Sc. Total 43.

1*a* ^{1}*hf*. Asst. Professor Love and Mr. Gaylord. — Algebra.
1 Ju., 8 So., 18 Fr., 5 Sp., 4 Sc. Total 36.

1*b* ^{1}*hf*. Asst. Professor Love and Mr. Brenke. — Trigonometry.
2 G. S., 3 Se., 3 Ju., 5 So., 13 Fr., 6 Sp., 1 Sc. Total 33.

1*d* ^{2}*hf*. Asst. Professor Love and Mr. Gaylord. — Analytic Geometry.
2 Ju., 12 So., 24 Fr., 14 Sp., 18 Sc. Total 70.

1*c*. Asst. Professor Huntington, Dr. H. N. Davis, and Mr. Shepard. — Differential and Integral Calculus.
2 G. S., 8 Ju., 9 So., 1 Fr., 9 Sp., 38 Sc. Total 67.

3*a*. Asst. Professor Kennedy, and Messrs. A. E. Norton, Albee, McKay, and Beard. — Mechanical Drawing.
3 G. S., 5 Se., 9 Ju., 17 So., 44 Fr., 29 Sp., 23 Sc. Total 130.

3*b* ^{1}*hf*. Messrs. A. E. Norton and Lewis. — Descriptive Geometry. Elementary Shades, Shadows, and Perspective.
1 G. S., 5 Ju., 8 So., 4 Sp., 35 Sc. Total 53.

3*d* ^{2}*hf*. Asst. Professor Kennedy and Mr. A. E. Norton. — Mechanism. Study of Gearing and Mechanical Movements.
1 G. S., 5 Ju., 8 So., 2 Fr., 6 Sp., 37 Sc. Total 59.

4*a*. Asst. Professor Hughes and assistants. — Plane and Topographical Surveying. (See page 95.)
1 G. S., 4 Se., 13 Ju., 29 So., 17 Fr., 14 Sp., 22 Sc. Total 100.

10*a*. Messrs. A. H. Morse and Markham. — Chipping, Filing, and Fitting. (See page 95.) 2 Se., 2 Ju., 7 So., 2 Fr., 3 Sp., 7 Sc. Total 23.

10*b*. Messrs. A. H. Morse and Markham. — Blacksmithing. (See page 95.)
2 Se., 2 Ju., 7 So., 2 Fr., 3 Sp., 7 Sc. Total 23.

10*c*. Messrs. A. H. Morse and Markham. — Pattern-making and Foundry Practice. (See page 95.) 2 Se., 2 Ju., 7 So., 2 Fr., 3 Sp., 10 Sc. Total 26.

10*e*. Messrs. A. H. Morse and Markham. — Machine Shop Practice. (See page 95.) 2 Se., 2 Ju., 7 So., 2 Fr., 3 Sp., 9 Sc. Total 25.

5*b* ^{1}*hf*. Professor L. J. Johnson and Mr. Nichols. — Elementary Statics. Graphic and Algebraic Methods.
4 G. S., 2 Se., 11 Ju., 18 So., 1 Fr., 13 Sp., 45 Sc. Total 94.

5*e* ^{2}*hf*. Asst. Professor Huntington, and Messrs. Camp and Nichols. — Elementary Kinematics and Kinetics.
1 G. S., 1 Se., 9 Ju., 8 So., 10 Sp., 33 Sc. Total 62.

5d [2]*hf*. Mr. A. É. Norton. — Resistance of Materials (introductory course for students of Architecture). Elementary Structural Design.
3 G. S., 2 So., 5 Sc. Total 10.

11*a* [2]*hf*. Professor Reeve (Worcester Polytechnic Institute), and Messrs. Markham and Andrus. — Steam Machinery (introductory course).
1 Gr., 4 Se., 7 Ju., 12 So., 8 Fr., 17 Sp., 46 Sc. Total 95.

For Undergraduates and Graduates : —

4*d*. Asst. Professor Hughes and assistants. — Railroad Engineering (first course). (See page 95.)
1 G. S., 2 Se., 10 Ju., 16 So., 14 Fr., 12 Sp., 20 Sc. Total 75.

5*a*. Professor Hollis, Asst. Professor Huntington, and Messrs. A. H. Morse and Forté. — Applied Mechanics, including Resistance of Materials.
1 Gr., 1 G. S., 9 Se., 11 Ju., 3 So., 6 Sp., 24 Sc. Total 55.

6*a* [2]*hf*. Asst. Professor Hughes and Mr. Andrus. — Hydraulics and Hydraulic Motors. 1 Gr., 2 G. S., 8 Se., 10 Ju., 6 So., 6 Sp., 24 Sc. Total 57.

12*b* [1]*hf*. Mr. A. H. Morse. — Elements of Thermodynamics. Theory of Heat Engines. 2 Gr., 1 G. S., 7 Se., 12 Ju., 3 So., 8 Sp., 25 Sc. Total 58.

13*a*. Professor Hollis, and Messrs. A. H. Morse and Durfee. — Engineering Laboratory. Introductory course in experimental methods.
2 Gr., 1 G. S., 9 Se., 9 Ju., 3 So., 6 Sp., 23 Sc. Total 53.

14*a*. Asst. Professor Kennedy. — Machine Design (introductory course).
4 Se., 8 Ju., 4 Sp., 9 Sc. Total 25.

16*a*. Professors Kennelly and Adams, and Messrs. Whiting and Crosse. — Generation, Transmission, and Utilization of Electrical Energy (elementary course). 1 Gr., 2 G. S., 7 Se., 2 Ju., 2 So., 3 Sp., 9 Sc. Total 26.

16*c* [1]*hf*. Professor Kennelly and Mr. Crosse. — Direct Current Dynamo-Electric Machinery. 1 G. S., 3 Se., 8 Ju., 2 So., 10 Sc. Total 24.

16*g* [2]*hf*. Professor Kennelly and Mr. Crosse. — Elementary Alternating Currents and Alternating Current Machinery.
1 G. S., 3 Se., 7 Ju., 2 So., 10 Sc. Total 23.

Primarily for Graduates : —

4*e* [2]*hf*. Asst. Professor Hughes. — Road Engineering.
1 G. S., 2 Se., 1 Ju., 3 So., 11 Sc. Total 18.

4*f* [1]*hf*. Asst. Professor Hughes. — Railroad Engineering (second course). Problems in railroad construction and maintenance.
3 Ju., 3 So., 11 Sc. Total 17.

5*f*. Professor L. J. Johnson. — Applied Mechanics (second course). Problems involved in the design of Bridges and Buildings.
1 G. S., 10 Sc. Total 11.

5g^1. Professor Hollis. — Applied Mechanics (second course). Problems involved in the design of Machinery and Boilers. 14 Sc. Total 14.

6*c* [1]*hf*. Asst. Professor Hughes. — Water Supply and Sanitary Engineering.
2 G. S., 1 Sp., 11 Sc. Total 14.

6*d* [2]*hf*. Mr. Safford. — Hydraulic Measurement. River, Harbor, Canal and Irrigation Works. 1 G. S., 11 Sc. Total 12.

7a. Professor L. J. **Johnson**. — Bridges and Buildings. Design of Framed Structures.
1 G. S., 10 Sc. Total 11.

8*a* ^{1}*hf*. Professor L. J. **Johnson** and Asst. Professor **Hughes**. — Building Stones, Masonry and Foundations.
6 G. S., 3 Se., 3 Ju., 2 So., 5 Sc. Total 19.

12*a* ^{2}*hf*. Professor **Reeve** (Worcester Polytechnic Institute). — Efficiency and Economics of Heat Engines.
1 Sp., 14 Sc. Total 15.

13*b*^{2}. Professor **Hollis** and Mr. **Gilson**. — Engineering Laboratory (second course).
14 Sc. Total 14.

14*b*^{1}. Professor **Hollis**, Asst. Professor **Kennedy**, and Mr. **Gilson**. — Machine Design (second course). Study and design of steam machinery.
14 Sc. Total 14.

16*e*. Professor **Adams** and Mr. **Sturges**. — Alternating Currents and Alternating Current Machinery.
1 G. S., 1 Se., 2 Ju., 12 Sc. Total 16.

16*d*. Professor **Adams** and Mr. **Sturges**. — Dynamo Design.
1 Gr., 1 G. S., 1 Ju., 12 Sc. Total 15.

16*f*. Mr. **Whiting**. — Electrical Engineering Laboratory.
1 G. S., 1 Ju., 12 Sc. Total 14.

17*a* ^{1}*hf*. Professor **Kennelly**. — Electric Transmission and Distribution of Power.
1 G. S., 1 Se., 1 Ju., 1 Sp., 12 Sc. Total 16.

17*b* ^{2}*hf*. Professor **Kennelly**. — Telegraphy and Telephony.
1 G. S., 1 Se., 1 Ju., 13 Sc. Total 16.

21^{2}. Conference on Engineering Subjects. 1 Ju., 1 Sp., 27 Sc. Total 29.

22^{2}. Asst. Professor **Wyman**. — Contracts and Specifications. General Principles of Common Law governing Construction Contracts.
1 Gr., 7 G. S., 3 Se., 2 Ju., 2 Sp., 43 Sc. Total 58.

Courses in Special Fields.

Primarily for Graduates: —

20*a*. Professor **Adams**. — Alternating Current Machinery. 1 Gr., 2 So. Total 3.

20*d*. Professor L. J. **Johnson**. Reinforced Concrete. 1 G. S. Total 1.

20*i*. Asst. Professor **Hughes**. — Specifications and Cost Data for Civil Engineering Construction.
1 Gr., 2 G. S. Total 3.

20*j*. Professor **Adams**. — Commutation in Direct Current Machines.
1 Gr. Total 1.

Forestry.

None of the courses in Forestry can be counted towards the degree of A.B.

For Undergraduates and Graduates: —

1*a* ^{1}*hf*. Asst. Professor **Fisher**. — Elements of Silviculture.
3 G.S., 2 Se., 4 So., 5 Sc., 1 Bu. Total 15.

1*b* ^{2}*hf*. Asst. Professor **Fisher**. — Practical Silviculture.
2 G. S., 1 Se., 3 So. Total 6.

2. Mr. **MacKaye**. — Forest Measurements. 3 G. S., 3 So., 1 Bu. Total 7.

3. Mr. JACK. — Forest Botany.
2 G. S., 2 Se., 1 So., 2 Sp., 3 Sc., 1 Bu. Total 11.

4 ^{2}*hf.* Mr. JACK. — Forest Protection.
1 Gr., 4 G. S., 1 Se., 2 So., 2 Sc. Total 10.

5 ^{1}*hf.* Mr. MACKAYE. — Forest History. 1 Gr., 3 G. S., 4 Sc. Total 8.

6^2. Asst. Professor CARY. — Lumbering. 1 Gr., 3 G. S., 3 Sc. Total 7.

7. Asst. Professor FISHER. — Forest Management.
1 Gr., 3 G. S., 3 Sc. Total 7.

8 ^{2}*hf.* Asst. Professor CARY. — Forest Technology.
1 Gr., 3 G. S., 3 Sc. Total 7.

Botany.

Primarily for Undergraduates: —

1 ^{2}*hf.* Professor GOODALE, assisted by Dr. CHRYSLER. — Botany (introductory course). 11 Se., 15 Ju., 35 So., 66 Fr., 14 Sp., 6 Sc. Total 147.

2 ^{1}*hf.* Professor THAXTER, assisted by Dr. A. F. BLAKESLEE and Mr. J. J. GROSSENBACHER. — Morphology of Plants.
1 Gr., 1 G. S., 5 Se., 10 Ju., 10 So., 2 Fr., 5 Sp., 4 Sc. Total 38.

For Undergraduates and Graduates: —

3*a* ^{1}*hf.* Asst. Professor JEFFREY, assisted by Dr. CHRYSLER. — Morphology, Histology, and Cytology of Flowering Plants.
2 Se., 2 Ju., 2 So., 1 Sp. Total 7.

3*b* ^{2}*hf.* Asst. Professor JEFFREY, assisted by Dr. CHRYSLER. — Œcology and Physiology of Flowering Plants. 2 Se., 2 Ju., 3 So., 1 Sp., 1 Sc. Total 9.

5. Professor GOODALE and Mr. AMES. — Outlines of Economic Botany.
1 So., 1 Fr., 1 Sp. Total 3.

6 ^{2}*hf.* Professor THAXTER and an assistant. — The Bacteria, Mycetozoa, and Higher Fungi. 1 Gr., 1 Se., 4 Ju., 1 Sp. Total 7.

7. Asst. Professor FERNALD. — Classification and Distribution of Flowering Plants, with special reference to the Flora of New England and the Maritime Provinces. 1 Gr., 2 Ju., 1 Sp. Total 4.

9 ^{1}*hf.* Asst. Professor JEFFREY, assisted by Dr. CHRYSLER. — The Anatomy, Development, and Phylogeny of the Siphonogamia (Higher Gymnosperms and the Angiosperms). 1 Gr., 2 Ju., 1 So., 1 Sc. Total 5.

Primarily for Graduates: —

COURSES OF RESEARCH.

20*a*. Professor GOODALE and Asst. Professor JEFFREY. — Experimental Vegetable Physiology. Economic Botany, with special reference to Tropical Plants. Structure and Development of Vascular Plants. 2 Gr. Total 2.

20*b*. Professors FARLOW and THAXTER. — Structure and Development of Cryptogams. 1 Gr. Total 1.

Zoölogy.

Primarily for Undergraduates: —

1 ^{1}*hf.* Professor G. H. Parker, assisted by Mr. Congdon. — Zoölogy (introductory course).
3 Gr., 7 Se., 13 Ju., 34 So., 62 Fr., 17 Sp., 10 Sc., 1 Bu. Total 147.

2 ^{2}*hf.* Asst. Professor Castle, assisted by Mr. Banta. — Morphology of Animals. 11 Ju., 6 So., 8 Fr., 1 Sp., 5 Sc. Total 31.

For Undergraduates and Graduates: —

3. Dr. H. W. Rand and Mr. Esterly. — Comparative Anatomy of Vertebrates. 3 Gr., 7 Se., 5 Ju., 2 So., 1 Fr., 3 Sc. Total 21.

4 ^{1}*hf.* Professor Mark and Dr. H. W. Rand. — Microscopical Anatomy.
2 Gr., 1 Se., 1 So. Total 4.

5 ^{2}*hf.* Professor Mark and Dr. H. W. Rand. — Embryology of Vertebrates. Early Stages of Development. 5 Gr., 2 Se., 1 So. Total 8.

9*a* ^{1}*hf.* Asst. Professor R. T. Jackson. — Fossil Invertebrates. 8 Gr. Total 8.

9*b* ^{2}*hf.* Asst. Professor R. T. Jackson. — Fossil Invertebrates. 2 Gr. Total 2.

14 ^{1}*hf.* Professor G. H. Parker. — Comparative Histology. Muscular and Sustentative Tissues. 6 Gr., 2 Se., 1 Sc. Total 9.

Primarily for Graduates: —

10*a* ^{1}*hf.* Asst. Professor Castle. — Influences of the Environment on Animal Form. 8 Gr. Total 8.

10*b* ^{2}*hf.* Asst. Professor Castle. — The Nature and Causes of Sex.
7 Gr., 1 G. S., 1 Se. Total 9.

16 ^{2}*hf.* Professor G. H. Parker. — The Structure and Functions of the Nervous System and its Relation to Animal Habits. Central Nervous Organs.
7 Gr., 1 Se., 1 Sc. Total 9.

Course of Research.

20. Professor Mark, Asst. Professor R. T. Jackson, Professor G. H. Parker, and Asst. Professor Castle. — Zoölogical Investigations. 9 Gr. Total 9.

Geology.

Geology and Geography.

Primarily for Undergraduates: —

4 ^{1}*hf.* Professors Davis and Wolff, and Asst. Professor Woodworth, assisted by Messrs. Eggleston, F. H. Sawyer, and Lahee. — Dynamical and Structural Geology.
1 Gr., 9 Se., 16 Ju., 15 So., 15 Fr., 12 Sp., 30 Sc. Total 98.

5 ^{2}*hf.* Asst. Professor Woodworth, assisted by Mr. Eggleston. — Historical Geology. 9 Se., 7 Ju., 10 So., 7 Fr., 8 Sp., 14 Sc. Total 55.

PHYSIOGRAPHY.

A [1]*hf*. Professor **Davis**, Asst. Professor D. W. **Johnson**, and Mr. **Saunders**. — Physiography of the Lands.
2 G. S., 5 Se., 4 Ju., 9 So., 16 Fr., 7 Sp., 6 Sc., 1 Bu. Total 50.

B [2]*hf*. Asst. Professor **Ward** and Mr. **Saunders**. — Meteorology (elementary course). 3 Se., 3 Ju., 5 So., 4 Fr., 2 Sp., 2 Sc. Total 19.

1 [1]*hf*. Asst. Professor **Ward**. — Meteorology (second course).
1 Se., 1 So., 1 Sp. Total 3.

For Undergraduates and Graduates: —

GEOLOGY.

8 [1]*hf*. Asst. Professor **Woodworth** and Dr. **Mansfield**. — Advanced General Geology. 2 Gr., 1 Se., 1 Ju., 5 So., 1 Sp., 2 Sc. Total 12.

16 [2]*hf*. Asst. Professor **Woodworth**. — Glacial Geology.
2 Gr., 3 Se., 1 Ju., 3 So., 1 Sp., 3 Sc. Total 13.

22. Dr. **Mansfield**. — Advanced Geological Field Work. Areal Geology in the vicinity of Boston. 1 Gr., 1 Se., 1 Sc. Total 3.

PALAEONTOLOGY.

11. Asst. Professor R. T. **Jackson**. — Palaeontology.
1 Gr., 1 So., 1 Sp., 1 Sc. Total 4.

15. Asst. Professor R. T. **Jackson**. — Advanced Historical Geology.
2 Gr., 1 Sc. Total 3.

ECONOMIC GEOLOGY.

10. Professor H. L. **Smyth**, assisted by Mr. J. B. **Marvin** and Mr. E. E. **White**. — Mining Geology. 2 Gr., 4 Se., 5 Ju., 2 So., 4 Sp., 5 Sc. Total 22.

PHYSIOGRAPHY.

6 [2]*hf*. Asst. Professor D. W. **Johnson** and Mr. **Merwin**. — Physiography of the United States.
2 Gr., 1 G. S., 4 Se., 3 Ju., 3 So., 6 Fr., 4 Sp., 3 Sc., 1 Bu. Total 27.

CLIMATOLOGY.

2 [2]*hf*. Asst. Professor **Ward**. — Climatology of the United States.
1 Gr., 1 Se., 3 So., 3 Sc. Total 8.

19 [1]*hf*. Asst. Professor **Ward**. — General Climatology. 1 Gr., 1 Ju. Total 2.

Primarily for Graduates: —

COURSES OF RESEARCH.

GEOLOGY.

20*c*. Professors **Davis**, **Wolff**, and H. L. **Smyth**, and Asst. Professor **Woodworth**. — Geological Investigation in the Field and Laboratory.
1 Gr. Total 1.

ECONOMIC GEOLOGY.

20*b*. Professor H. L. SMYTH. — Mining Geology (advanced course).
1 Ju. Total 1.

PHYSIOGRAPHY.

‡20*a*. Professor DAVIS. — Physiography (advanced course).
4 Gr., 2 Se., 1 So., 1 Sc. Total 8.

CLIMATOLOGY.

20*e*. Asst. Professor WARD. — Climatology (advanced course). 2 Gr. Total 2.

Mineralogy and Petrography.

Primarily for Undergraduates: —

2. Asst. Professor PALACHE, assisted by Mr. R. W. RICHARDS. — Mineralogy (including Crystallography, Physical and Chemical Mineralogy, and Descriptive Mineralogy).
2 Gr., 7 Se., 6 Ju., 2 So., 3 Sp., 8 Sc. Total 28.

For Undergraduates and Graduates: —

7 [1]*hf*. Asst. Professor PALACHE. — Advanced Mineralogy and Crystallography.
3 Gr., 1 G. S. Total 4.

8 [2]*hf*. Professor WOLFF. — Optical Crystallography.
1 Gr., 1 G. S., 1 So. Total 3.

12. Professor WOLFF, assisted by Mr. R. W. RICHARDS. — Petrography.
3 Gr., 2 G. S., 2 Se., 1 So., 1 Sp., 1 Sc. Total 10.

Primarily for Graduates: —

14 [2]*hf*. Professor WOLFF. — Advanced Petrography. 1 Gr., 1 G. S. Total 2.

Mining and Metallurgy.

Primarily for Undergraduates: —

1 [2]*hf*. Professor H. L. SMYTH and Asst. Professor RAYMER, assisted by Mr. J. B. MARVIN. — Elements of Mining. Prospecting, exploring, development and the principles of exploitation. Stamp-milling and ore-concentration.
1 Gr., 1 G. S., 2 Se., 2 Ju., 2 So., 2 Sp., 3 Sc. Total 13.

6 [2]*hf*. Asst. Professor C. H. WHITE, assisted by Mr. E. M. SAWYER. — Metallurgical Chemistry. 1 G. S., 3 Se., 5 Ju., 4 So., 1 Sp., 4 Sc. Total 18.

9 [2]*hf*. Professors SAUVEUR and PETERS, and Mr. H. M. BOYLSTON, assisted by Mr. J. B. MARVIN. — General Metallurgy.
1 Gr., 2 G. S., 7 Se., 12 Ju., 6 So., 3 Fr., 5 Sp., 8 Sc. Total 44.

10 [1]*hf*. Asst. Professor RAYMER, assisted by Mr. E. M. SAWYER. — Fire Assaying.
1 G. S., 3 Se., 3 Ju., 2 So., 1 Sp., 5 Sc. Total 15.

For Undergraduates and Graduates: —

2 [1]*hf*. Professor SAUVEUR and Mr. H. M. BOYLSTON, assisted by Mr. E. E. WHITE. — Metallurgy of Iron and Steel.
1 Gr., 1 G. S., 4 Se., 7 Ju., 5 So., 10 Sp., 19 Sc. Total 47.

3 ^{2}*hf*. Professor Peters, assisted by Mr. E. M. Sawyer. — Metallurgy of Copper, Lead, Zinc, and the Minor Metals, and of the Precious Metals in connection with Copper and Lead.
2 Gr., 2 Se., 2 Ju., 2 So., 7 Sc. Total 15.

4 ^{2}. Asst. Professor Raymer, assisted by Mr. E. E. White. — Ore-dressing, Concentration, and Milling. 1 Gr., 1 G. S., 1 Se., 2 So., 4 Sc. Total 9.

5 ^{1}*hf*. Professor H. L. Smyth, assisted by Mr. E. E. White. — Metal and Coal Mining; Exploitation. 1 Se., 1 So., 1 Sp., 3 Sc. Total 6.

7. Asst. Professor C. H. White. — Metallurgical Chemistry (advanced course).
2 Sp. Total 2.

11 ^{2}*hf*. Asst. Professor Raymer. — Mining Plant.
1 Gr., 2 G. S., 1 Se., 4 Sc. Total 8.

12. Asst. Professor Raymer. — Mining. The study of mining operations.
1 G. S., 1 Ju., 1 So., 1 Sp., 1 Sc. Total 5.

14 ^{2}*hf*. Professor Sauveur and Mr. H. M. Boylston. — Metallography.
1 G. S., 1 So., 1 Sp. Total 3.

15 ^{2}*hf*. Professor Peters. — Metallurgy of Zinc, Nickel, Tin, Mercury, and the Minor Metals. 1 Se., 1 Ju., 1 So., 1 Sp., 1 Sc. Total 5.

Primarily for Graduates: —

8 ^{1}. Asst. Professor C. H. White. — Leaching Processes for Gold and Silver Ores. 2 G. S., 1 Se. Total 3.

17 ^{1}. Asst. Professor Raymer. — Mine Surveying. 1 G. S., 1 Se. Total 2.

22 ^{1}. Asst. Professors Raymer and C. H. White. — Problems in the Treatment of Ores. 2 G. S. Total 2.

24 ^{2}. Professor H. L. Smyth. — Mine Examination and Reports.
1 G. S. Total 1.

26 ^{2}*hf*. Professor Peters. — Advanced Course in the Metallurgy of Copper, Lead, and the Minor Metals. 2 Se., 2 So., 1 Sp., 2 Sc. Total 7.

28 ^{1}*hf*. Dr. Mansfield. — Geological Surveying.
1 Gr., 1 G. S., 2 So., 1 Sp., 3 Sc. Total 8.

30 ^{2}. The Instructors in the Department. — Mining and Metallurgical Projects and Design. 3 G. S. Total 3.

Course of Research.

20. Professor Sauveur. — Metallurgy and the Physics of Metals.
1 So., 2 Sp. Total 3.

Anthropology.

Primarily for Undergraduates: —

1. Asst. Professor Dixon and Dr. Tozzer, assisted by Mr. Spinden. Occasional lectures by Professor Putnam — General Anthropology.
9 Se., 18 Ju., 37 So., 2 Fr., 6 Sp., 1 Bu. Total 73.

For Undergraduates and Graduates: —

5. Asst. Professor **Dixon**, assisted by Mr. **Spinden**. Occasional lectures by Professor **Putnam**. — American Archaeology and Ethnology.
1 Gr., 12 Se., 17 Ju., 48 So., 3 Fr., 5 Sp. Total 86.

4 ¹*hf*. Dr. **Charles Peabody**. — Prehistoric Archaeology. European Ethnography. 2 Gr., 3 Se., 1 So., 1 Sp. Total 7.

7 ²*hf*. Asst. Professor **Dixon**. — Ethnology of Oceania.
3 Gr., 1 Se., 2 Ju., 1 So. Total 7.

Primarily for Graduates: —

‡8 ¹*hf*. Asst. Professor **Dixon**. — American Indian Languages. 1 Gr. Total 1.

‡9 ¹*hf*. Dr. **Tozzer**. — Archaeology and Hieroglyphic Systems of Central America.
3 Gr., 4 Se., 1 So. Total 8

Courses of Research.

‡20*a*. Professor **Putnam**. — American Archaeology and Ethnology.
2 Gr., 1 Se., 2 So. Total 5.

‡20*d*. Asst. Professor **Dixon**. — General Ethnology. 3 Gr. Total 3.

‡20*e*. Dr. **Tozzer**. — Central American and Mexican Hieroglyphic and Picture Writing. 1 Se. Total 1.

Anatomy, Physiology, and Hygiene.

Courses in Anatomy, Physiology, and Hygiene may be counted towards the degree of S.B. only, with the exception of Course 1, which may also be counted towards the degree of A.B.

1. Drs. **Darling**, **Provandie**, **Bacon**, **Hapgood** and **Jouett**. — Elementary Anatomy and Physiology. Personal Hygiene. Emergencies.
19 Se., 42 Ju., 74 So., 13 Fr., 6 Sp., 6 Sc. Total 160.

5 ²*hf*. Dr. **D. A. Sargent**. — Applied Anatomy and Animal Mechanics.
2 Se., 1 Sp. Total 3.

In accordance with the vote of the President and Fellows whereby the Faculty may under certain conditions authorize a Doctor of Philosophy or a Doctor of Science to give instruction gratuitously or for such fees as he may himself collect, Benjamin Apthorp Gould Fuller, Ph.D., was authorized to give in the second half-year a course in the Enneads of Plotinus.

The Larger Courses of Study.

The following table shows, for the last three academic years, the number of enrolments in every course containing more than a hundred students: —

Course.	Number of Students in 1904–05.	in 1905–06.	in 1906–07.
Greek 11			143
Latin *B*	136	125	152
Latin 10		115	
English *A*	563	504	525
English 31	211	175	(Eng. D) 227
English 28	110	104	144
English 2	120	112	
English 42*b*		102	
English 15		129	
English 7*b*			217
English 8*a*		160	104
English 8*b*		127	
English 33		131	
German *A*	289	248	330
German 25			121
French *A*	144	119	134
French 2*c*	196	165	105
French 2*a*	107	104	110
Comparative Literature 1			122
Comparative Literature 12			166
History 1*a*	380	331	308
History 12*a*		102	126
History 12*b*			115
History 16*a*	179	141	132
History 16*b*	159	125	113
History 13	139	108	104
Government 1	431	384	388
Government 16		116	
Economics 1	438	470	392
Economics 7 . . . (Econ. 7*b*)		137	
Economics 5	139	138	205
Economics 6*b*			112
Economics 9*b*			236
Economics 8*b*		105	
Economics 21	182	150	152
Philosophy 1*a*	215	226	
Philosophy *A*			124
Philosophy *B*			170
Philosophy *D*			133
Philosophy *E*			216
Social Ethics 1 . . . (Phil. 5)	122	165	175
Fine Arts 3			107
Astronomy 1	130	166	
Physics *C*	198	180	190
Chemistry 1	332	311	298
Chemistry 3			109
Engineering 1*a*	121	111	
Engineering 1*b*	161	153	
Engineering 1*d*	127	127	
Engineering 3*a*	145	148	130
Engineering 4*a*	107	103	
Engineering 5*b*	125	104	
Engineering 11*a*	119	103	
Botany 1	219	147	147
Zoölogy 1	184	119	147
Anatomy, Physiol., & Hygiene	139	153	160

Economics 1, with seventy-eight students less than in 1905–06, remains the largest elective course. Government 1 follows it closely. The only other course with more then three hundred students is History 1*a*.

Summer Courses of Instruction.

The following courses (sixty-one as compared with sixty in 1906) were given, under the direction of the Faculty, in the summer of 1907. The abbreviations, with the addition of S.S. for "member of the Summer School," are the same as those in the preceding list. A hand ☞ points to each course that may be counted toward a degree: —

Anthropology.

☞ Dr. A. M. Tozzer. — General Anthropology. 5 times a week, for 6 weeks. 4 Ju., 10 So., 3 Fr., 3 S. S. Total 20.

Architecture.

Asst. Professor Mowll. — Architectural Design. 5 times a week, for 6 weeks. 1 G. S., 1 Sc., 1 S. S. Total 3.

☞ Professor H. L. Warren. — History of European Architecture to about 1000 A.D. 5 times a week, for 6 weeks. 3 Ju., 5 So., 3 Fr., 1 Sp., 1 R., 1 S. S. Total 14.

☞ Professor H. L. Warren. — History of European Architecture from about 1000 A.D. to the close of the Renaissance. 5 times a week, for 6 weeks. 1 Ju., 2 So., 1 Med., 2 S. S. Total 6.

Astronomy.

☞ Dr. W. C. Brenke. — Elementary Course in Practical Astronomy. 5 times a week, for 6 weeks. 3 S. S. Total 3.

Botany.

☞ S1. Dr. R. G. Leavitt and Mr. L. J. Spalding. — Introductory Course: The Structure, Physiology, and Œcology of Flowering Plants. 5 times a week, for 6 weeks. 1 So., 6 S. S. Total 7.

☞ S2. Dr. M. A. Chrysler. — Advanced Course: Morphology and Œcology of Flowering Plants. 5 times a week, for 6 weeks. 1 Sp., 1 R., 6 S. S. Total 8.

Chemistry.

Asst. Professor Baxter and Mr. A. C. Boylston. — Elementary Chemistry. 5 times a week, for 6 weeks. 1 Se., 1 So., 1 R., 12 S. S. Total 15.

☞ Asst. Professor Baxter. — Quantitative Analysis. 5 times a week, for 6 weeks. 6 S. S. Total 6.

☞ Asst. Professor Torrey. — Organic Chemistry. 5 times a week, for 6 weeks. 1 Gr., 1 Sc., 1 Med., 7 S. S. Total 10.

☞ Asst. Professors Baxter and Torrey. — Chemical Research. 1 G. S., 1 Ju., 1 S. S. Total 3.

Education.

☞ Professor H. H. Horne (Dartmouth College). — Educational Psychology. 5 times a week, for 6 weeks. 1 So., 11 S. S. Total 12.

☞ Professor H. H. Horne (Dartmouth College). — General Principles of Education. 5 times a week, for 6 weeks. 1 So., 17 S. S. Total 18.

☞ Supt. Stratton D. Brooks (Boston). — Schools and School Systems. 5 times a week, for 6 weeks. 29 S. S. Total 29.

English.

A. Mr. H. M. Rideout. — English Composition (elementary course). 5 times a week, for 6 weeks. 1 Gr., 39 S. S. Total 40.

B. Mr. W. R. Castle, Jr. — English Composition (advanced course). 5 times a week, for 6 weeks. 1 Gr., 1 So., 20 S. S. Total 22.

C. Dr. R. P. Utter (Amherst College). — English Composition (second advanced course). 5 times a week, for 6 weeks. 1 Gr., 9 S. S. Total 10.

D. Professor H. B. Huntington (Brown Univ.). — Argumentation. 5 times a week, for six weeks. 4 S. S. Total 4.

Professor H. B. Huntington (Brown Univ.). — College Admission Requirements in English. 5 times a week, for 6 weeks. 39 S. S. Total 39.

☞ Dr. H. de W. Fuller. — Anglo-Saxon. Anglo-Saxon Reader and Grammar. 5 times a week, for 6 weeks. 4 S. S. Total 4.

Dr. H. de W. Fuller. — Shakspere. 5 times a week, for 6 weeks. 5 S. S. Total 5.

Mr. H. M. Rideout. — English Literature of the Eighteenth Century. 5 times a week, for 6 weeks. 4 S. S. Total 4.

Mr. Copeland. — English Literature of the Nineteenth Century, from the publication of the Lyrical Ballads to the death of Tennyson. 5 times a week, for 6 weeks. 1 Gr., 1 R., 32 S. S. Total 34.

Fine Arts.

☞ Asst. Professor Chase. — History of Ancient Art. 5 times a week, for 6 weeks. 2 Se., 5 Ju., 12 So., 8 Fr., 1 Sc., 3 Sp., 4 S. S. Total 35.

☞ Mr. F. G. Fitzpatrick. — Fine Arts of the Middle Ages. 5 times a week, for 6 weeks. 1 Se., 3 Ju., 8 So., 3 Fr., 1 Sp., 7 S. S. Total 23.

☞ Mr. M. Mower. — Elements of Drawing and Painting. 5 times a week, for 6 weeks. 1 So., 9 S. S. Total 10.

French.

☞ Mr. W. B. Snow. — Intermediate French Course for Teachers. 5 times a week, for 6 weeks. 7 S. S. Total 7.

Geography.

☞ Asst. Professor D. W. Johnson. — Physical Geography. Lectures, laboratory and field work. 5 times a week, for 6 weeks. 1 Ju., 9 S. S. Total 10.

Geology.

☞ Dr. G. R. Mansfield. — Field Course in Structural and Historical Geology. 6 times a week, for 5 weeks. 1 Se., 2 Ju., 1 So., 1 Fr., 2 Sp., 1 Gr., 2 S. S. Total 10.

☞ Professor Wolff and Asst. Professor Woodworth. — Geological Field Investigation. 1 Sc. Total 1.

German.

☞ Dr. Boesche. — Composition and Conversation; Methods of Teaching German. 5 times a week, for 6 weeks. 24 S. S. Total 24.

Greek.

Asst. Professor Gulick. — Greek for Beginners. 5 times a week, for 6 weeks. 1 Sp., 4 S. S. Total 5.

Asst. Professor Gulick. —Advanced Course. 5 times a week, for six weeks. 1 R., 2 S. S. Total 3.

History and Government.

☞ Professor W. S. Ferguson (Univ. of California). — Roman History. 5 times a week, for 6 weeks. 1 So., 5 S. S. Total 6.

☞ Professor N. M. Trenholme (Univ. of Missouri). — Mediaeval European History. 5 times a week, for 6 weeks. 12 S. S. Total 12.

☞ Professor Jonas Viles (Univ. of Missouri). — American History. 5 times a week, for 6 weeks. 1 Ju., 14 S. S. Total 15.

☞ Asst. Professor Munro. — Civil Government. 5 times a week, for 6 weeks. 7 S. S. Total 7.

☞ Asst. Professor Munro. — Municipal Government. 5 times a week, for 6 weeks. 1 Se., 2 Ju., 4 So., 2 Fr., 1 Sp., 5 S. S. Total 15.

Latin.

Asst. Professor E. K. Rand. — General Course for Teachers. 5 times a week, for 6 weeks. 19 S. S. Total 19.

☞ Asst. Professor E. K. Rand. — The Life and Works of Virgil. 5 times a week, for 6 weeks. 10 S. S. Total 10.

Mathematics.

☞ Asst. Professor Love. — Advanced Algebra. 5 times a week, for 6 weeks. 1 So., 1 Fr., 12 S. S. Total 14.

☞ Mr. H. D. Gaylord. — Solid Geometry. 5 times a week, for 6 weeks. 2 Sc., 6 S. S. Total 8.

☞ Dr. W. C. Brenke. — Plane Trigonometry. 5 times a week, for 6 weeks. 2 Fr., 4 S. S. Total 6.

☞ Asst. Professor Whittemore. — Plane Analytic Geometry. 5 times a week, for 6 weeks. 1 Ju., 2 So., 1 Sp., 1 Sc., 6 S. S. Total 11.

Professor Osgood. — Differential and Integral Calculus. 5 times a week, for 6 weeks. 1 So., 1 G. S., 2 Sc., 11 S. S. Total 15.

Music.

☞ Mr. Heilman. — Harmony and Simple Counterpoint. 4 times a week, for 6 weeks. 1 Fr., 1 Law, 6 S. S. Total 8.

☞ Mr. D. G. Mason. — Musical Analysis. 4 times a week, for 6 weeks. 3 Ju., 8 So., 2 Sp., 1 Law, 3 S. S. Total 17.

Nature Study.

Professors F. E. Lloyd (Carnegie Desert Botanical Laboratory) and W. H. Dudley (Wisconsin State Normal School). — Course for Teachers. 5 times a week, for 6 weeks. 12 S. S. Total 12.

Philosophy.

☞ Professor Royce. — General Introduction to Philosophy. 5 times a week, for 6 weeks. 1 Ju., 6 So., 1 Fr., 1 Sp., 18 S. S. Total 27.

☞ Professor Royce. — Introduction to Ethics. 5 times a week, for 6 weeks. 1 Ju., 4 So., 1 Fr., 1 Sp., 1 R., 14 S. S. Total 22.

Physical Education.

Dr. Sargent and assistants. — Elementary and advanced courses in theory. 5 weeks. 62 S. S. Total 62.

Dr. Sargent and assistants. — Elementary and advanced courses in practice. 5 weeks. 117 S. S. Total 117.

Physics.

Professor Sabine, Professor W. E. McElfresh (Williams College), and Dr. J. L. Hogg. — Elementary Experimental Physics. 5 times a week, for 6 weeks. 1 So., 1 Fr., 1 Di., 22 S. S. Total 25.

☞ *C.* Dr. H. W. Morse. — Advanced Course in Physics. 5 times a week, for 6 weeks. 3 So., 1 Sp., 9 S. S. Total 13.

Psychology.

☞ Dr. Yerkes. — Descriptive Psychology. 5 times a week, for 6 weeks. 2 Se., 5 Ju., 3 So., 1 Sp., 1 Med., 13 S. S. Total 25.

☞ Dr. Yerkes. — Applied Psychology. 5 times a week, for 6 weeks. 1 Ju., 3 So., 1 Med., 13 S. S. Total 18.

Public Speaking, Platform Reading, Voice Training.

Asst. Professor Winter and Mr. Willard. — Development of the Voice. 5 times a week, for 6 weeks. 1 So., 1 R., 17 S. S. Total 19.

Asst. Professor Winter and Mr. Willard. — Reading and Oral Discussion. 5 times a week, for 6 weeks. 10 S. S. Total 10.

Asst. Professor Winter and Mr. Willard. — Platform Speaking. 5 times a week, for 6 weeks. 15 S. S. Total 15.

Asst. Professor Winter. — Oral Reading of English Classics. 3 times a week, for 6 weeks. 1 R., 41 S. S. Total 42.

Spanish.

☞ Mr. G. L. Lincoln. — Advanced Course. 5 times a week, for 6 weeks. 1 Ju., 1 So., 4 S. S. Total 6.

Engineering.

The following courses were given in the summer as part of the regular instruction of the Lawrence Scientific School. Some of them were given at Squam Lake, New Hampshire: —

4a. Asst. Professor Hughes. — Plane Surveying. Field work. Daily, 6 weeks.
1 G.S., 4 Se., 13 Ju., 29 So., 17 Fr., 14 Sp., 21 Sc., 12 S.S. Total 111.

4d. Asst. Professor Hughes. — Railroad Surveying. Daily, 5 weeks.
1 G. S., 2 Se., 10 Ju., 16 So., 14 Fr., 12 Sp., 19 Sc., 6 S. S. Total 80.

10*a*. Mr. A. H. Morse, assisted by Mr. E. R. Markham. — Chipping, filing, and fitting. 90 hours.
2 Se., 2 Ju., 7 So., 2 Fr., 3 Sp., 7 Sc., 2 S. S. Total 25.

10*b*. Mr. A. H. Morse, assisted by Mr. E. R. Markham. — Blacksmithing. 90 hours. 2 Se., 2 Ju., 7 So., 2 Fr., 3 Sp., 7 Sc., 2 S. S. Total 25.

10*c*. Mr. A. H. Morse, assisted by Mr. E. R. Markham. — Pattern Making, etc. 90 hours. 2 Se., 2 Ju., 7 So., 2 Fr., 3 Sp., 10 Sc., 4 S. S. Total 30.

10*e*. Mr. A. H. Morse, assisted by Mr. E. R. Markham. — Machine-Shop Practice. 90 hours.
2 Se., 2 Ju., 7 So., 2 Fr., 3 Sp., 9 Sc., 2 S. S. Total 27.

The following table shows the enrolment in the Afternoon and Saturday Courses for teachers: —

Subject and Instructor.	Men.	Women.	Total.
ARCHITECTURE: Mr. W. D. Swan, assisted by Mr. H. V. Skene	1	1	2
EDUCATION:			
General Principles: Professor Hanus	30	10	40
Applications of Psychology to Teaching: Asst. Professor Norton	3	—	3
FINE ARTS:			
Theory of Pure Design: Dr. Denman W. Ross, assisted by Mr. E. O. Parker	10	33	43
FRENCH. Associate Professor de Sumichrast	1	7	8
AMERICAN HISTORY. Professor Channing	5	17	22
LATIN. Professor Clifford H. Moore	4	5	9
MATHEMATICS. Professor W. F. Osgood, Asst. Professor E. V. Huntington, Dr. J. L. Coolidge	1	4	5
PRINCIPLES OF MUSIC. Asst. Professor W. R. Spalding	3	2	5
PHILOSOPHY. Professor Royce	2	7	9
PUBLIC SPEAKING. Asst. Professor I. L. Winter	—	10	10
	60	96	156
Deduct for names inserted more than once			3
			153

In February the Faculty voted: —

"1. That the Departments under this Faculty be invited to offer Afternoon and Saturday Courses of instruction, intended primarily for teachers in service, during the academic year 1907–08, the courses ordinarily to begin during the first week in December, 1907, and to close about April, 1908.

"2. That the fee for each course be fifteen dollars as at present.

"3. That the Committee may withdraw the offer of any course which has not attracted at least five students.

"4. That the Faculty authorizes the Committee to grant certificates on the recommendation of instructors to those students who do the required work and satisfactorily pass a final examination. The form of certificate proposed by the Committee is

HARVARD UNIVERSITY
AFTERNOON AND SATURDAY COURSES FOR TEACHERS

.... has attended courses of .... lectures in .... and has performed the required exercises (about .... hours' work) and passed satisfactorily in a final examination."

VOTES RELATING TO DEGREES.

In December the Faculty added *Mining and Metallurgy* to the subjects in which students may become candidates for the degree of S.D.; in February it added *Education* and the *History and Principles of the Fine Arts* to the subjects in which students may become candidates for the degree of Ph.D.; in December it changed the statement of the requirements for the degree of S.M. in accordance with the following vote: —

"The candidate shall have done the equivalent of the four-year programme of study in the Lawrence Scientific School in the subject which he wishes to pursue."

Since the degree of S.B. may now be obtained in Harvard College without special attention to Science, it is no longer possible to accept this degree, without qualifications, as a basis of work for the degree of S.M.

AWARD OF PRIZES.

I print the names of students who, in 1906–07, won prizes in competitions recognized by the Faculty: —

Prize, — Amount.	For what.	Name and Academic Position.
Jeremy Belknap, $50	Translation into French of a passage from Matthew Arnold's Essay on Joubert.	Edmund Charles Wendt, Freshman.
Bowdoin, $250	Tennyson and his Literary Heritage.	Alain LeRoy Locke, Sophomore.
" $200	The Motion of a Violin String.	Harvey Nathaniel Davis, Instructor.
" $200	The Spread of Greek Influence through Translations in the Fifteenth Century.	Dean Putnam Lockwood, 4 Graduate.
" $100	Lessing and Johnson in relation to their Critical Heritage: A Comparative Study.	Hyman Askowith, Senior.
" $100	De vita operibusque Rinucci Aretini.	Dean Putnam Lockwood, 4 Graduate.
" $50	Translation into Attic Greek.	Harry Wheatland Litchfield, Senior.
" $50	Translation into Latin.	Frederick Livesey, Junior.
" $50	The Metropolitan Water System of Boston.	Abraham Edward Pinanski, Sophomore.
" $50	The Stone Insurrection: A Study in Southern Slavery.	Robert Neil Thompson, Senior.
Boylston, $60	For Elocution.	Isaiah Leo Sharfman, Senior.
" $60	" "	Gilbert Julius Hirsch, Senior.
" $45	" "	Artemas Russell Ellis, Senior.
" $45	" "	Edwin French Tyson, Senior.
" $45	" "	Marston Allen, Junior.
Coolidge, $100	Trials for Harvard-Yale Debate.	Henry Hurwitz, Junior.
" $100	Trials for Harvard-Princeton Debate.	Edward Rieman Lewis, Junior.
Dante, $50 (½ prize)	Characteristics of the Vita Nuova.	Alexander Guy Holborn Spiers, 3 Graduate.
Franklin, $250	For the best undergraduate essay in History 10 on Franklin's works.	Henry Raven Gilbert, Sophomore.
Lloyd McKim Garrison, $100 and a silver medal	Poem "Tschaikowsky."	Robert Emmons Rogers, Sophomore.
Pasteur Medal	For a debate on a subject drawn from Contemporary French Politics.	Isaac Dimond, Sophomore.
Wendell Phillips, $50	For oratorical power.	Myron Colver Leckner, Senior.
Ricardo Prize Scholarship, $350		Aaron Prussian, Junior.
Sargent, $100	Translation into verse of the thirty-seventh Ode of the First Book of Horace.	Richard John Walsh, Senior.
Sohier, $250	Best thesis of successful candidate for Honors in English or Modern Literature.	Divided between Hermann Hagedorn, Jr., Sen., and Samuel Montefiore Waxman, Senior.
Toppan, $150	The Government and Parties of Japan.	Fred Wayne Catlett, 3 Law.
Philip Washburn, $75	The Economic Aspects of the Peasants' War in Germany, 1525.	Harrison Clifford Dale, Senior.
David A. Wells, $500.	The Stannaries: A Study of the English Tin Miner.	George Randall Lewis, Ph.D.

The Faculty had a singularly uneventful and peaceful year. The most important communication which it received came in January from the Board of Overseers: —

> "1. That in the opinion of this Board no subject or branch of instruction involving additional expense should be added to the courses at present in charge of the Faculty of Arts and Sciences except after mature deliberation of the governing boards of the University.
>
> "2. That the Faculty of Arts and Sciences be and hereby is requested to undertake a comprehensive revision of the present scheme of instruction with a view to securing more concentration of effort, increased educational efficiency, and, if practicable, diminished expenditure."

This communication was referred to the Committee on Instruction for consideration and report.

The document consists of a recommendation and a request, both resulting from the Board's study of the Elective Pamphlet in connection with the heavy deficits of preceding years. The recommendation concerns new Departments such as every university is tempted to establish with inadequate endowments or with no endowments at all. This subject touches the relation of the American college to the American University, — the waste of energy, of money, and of educational influence in the elevation of more than a few colleges into universities, and the waste from the competition of universities in the more remote subjects of learning. The questions suggested by this paragraph of the Overseers' communication are of immense educational importance; but unless the government of Harvard University is radically changed, they are not questions for the Faculty of Arts and Sciences, which rarely hears of new Departments till they have been established by the governing boards. A gift or a guarantee or the strong pressure of persons interested leads to engagements with new instructors or professors in new subjects; and these engagements are to all intents and purposes made before the matter reaches the Committee on Instruction. This Committee gets its first information from manuscript or proof presented to it for the Elective Pamphlet. It concerns itself therefore with the question whether the courses offered in the new subject are substantial courses, not whether instruction in the new subject shall or shall not be established.

A somewhat similar difficulty faces the Faculty in regard to the second paragraph of the Overseers' communication. The Committee on Instruction had already studied the Elective Pamphlet from beginning to end, testing, with the aid of the chairmen of the several

Departments, every course about the value of which there was any doubt (*provided the teaching force remained what it was*). There are but two methods of reducing the elective offering and saving expense thereby: (1) by reducing the number of teachers in charge of courses, that is, by discharging members of the Faculty; (2) by cutting off annual appointments, and requiring professors to do the work now done by assistants.

With the first of these methods the Faculty has nothing to do. Even additions to its staff are determined without its knowledge or the knowledge of the Committee on Instruction; sometimes without the knowledge of the Departments most intimately concerned. Again, a newly appointed professor may come with distinct assurance that he shall teach certain parts of his subject to which he has given special attention — in short, that he may plan his teaching almost or quite as he pleases. Much may be said for this policy as a means of attracting valuable men and keeping their enthusiasm — as truly a university method; but it is not a policy that tends toward what the Overseers have in mind.

All this bears on the feasibility of the second method of reducing the elective offering. Many of the best professors would not come or would not stay if required to do the work now performed by assistants, — if required, for example, to read hundreds of examination books and to mark thousands of elementary exercises; nor is such work an economical expenditure of time and strength for men whose scholarship and salaries are high. Yet unless it is done by somebody, the standard of instruction falls.

The only way that I can see of improving, with our present force, our already rich and varied instruction is through increased stress on offering what should be taught rather than what the teachers wish to teach. I say this with hesitation, because I understand the value of the teacher's freedom which has helped to give Harvard University its distinction and has drawn to it many of its best teachers; because also there is already in every Department a distinct effort to teach what should be taught. It is said, for instance, that in every subject one course at least should deal, not with minutiae, but with those larger matters which for persons who are not to be specialists in that subject are most interesting and valuable; that in every subject there should be at least one so-called "culture course." Hard as it is to keep up the standard of work in such courses, I believe there should be more of them than there are. But the experts in the various Departments nearly always maintain that the Departments amply provide them now.

Large elementary courses, if not so large as to be unwieldy, are admirable introductions not only to great subjects of study, but to the strongest teachers, — the men whose influence is widest and best. Many graduates who are by no means scientific have received their most lasting stimulus from a course conducted years ago by Professor James in which he discussed the greater movements of modern scientific thought. Some of the best teachers in the country have conducted, and still conduct, courses for our younger students with mutual benefit. No better scheme has yet been devised than that of the Division of Mathematics, wherein every teacher of Faculty rank has work with younger students and other work with older ones — a scheme helpful to students and teachers alike. We need to show all our best teachers, not merely some of them, that Freshmen are as important and as interesting as candidates for the Doctor's degree.

Scrutiny of the Elective Pamphlet detects few courses, if any, which the Departments offering them cannot ably defend. Some men overvalue their own Departments and undervalue other peoples'; there are few teachers whose instruction somebody will not pronounce worthless or worse: yet from a catholic point of view what we need is not fewer teachers, but more, — teachers to fill gaps which a study of the Elective Pamphlet reveals. In a subject of universal recognition, History, we need to be strengthened on the ancient side and on the modern. Greek History, Roman History, Roman Law, the development of the East to-day, the development of South America to-day, — these are subjects for which we need additional teachers. In Chemistry we need to be strengthened on the industrial side. Similar needs may be discovered in other Departments; so difficult is it for a university to meet the complicated demands of modern intellectual life.

L. B. R. BRIGGS, *Dean*.

THE COLLEGE.

To the President of the University: —

Sir, — I have the honor to present to you a report on Harvard College for the academic year 1906–07.

The total number of students in the College at the time when the lists were compiled for the Catalogue of 1906–07 was two thousand two hundred and forty-seven, divided as follows: —

Seniors	328
Juniors	418
Sophomores	633
Freshmen	605
Total number of Undergraduates	1984
Special Students	263
Total	2247

These figures, compared with those at the corresponding time in 1905–06, show a gain of three hundred and forty-eight: —

	Gain.
Seniors	86
Juniors	1
Sophomores	32
Freshmen	117
Special Students	112
Net gain	348

This great gain, as was pointed out in the Catalogue for the year, was due not to a sudden increase in the number coming from the class from which the College is habitually recruited, but to the establishment of the degree of Bachelor of Science in Harvard College, which led to the registration in the College of about three hundred students who formerly would have registered in the Scientific School.

During the year the following students died: —

John Phillips Bigelow, '09,	April 25, 1907.
Curtis Parker, '09,	July 3, 1907.
Edward Rawson, Jr., '09,	March 27, 1907.

Four hundred and forty-eight students — thirteen in March and four hundred and thirty-five in June — received the degree of Bachelor of Arts in course. (Compared with the figures of the preceding year, these show an increase of sixty-five.) Of these, two hundred and sixty-eight (including nine who were recommended for the degree in March) were registered in the Senior Class. The registration of the others is shown in the next table: —

On leave of absence all the year	30
On leave of absence first half-year	0
On leave of absence second half-year	27
Graduate Students in Arts and Sciences	13
Graduate Students in Applied Science	6
Registered in the Law School	20
Registered in the Medical School	10
Registered in the Scientific School	2
Special Students	1
Registered in the Sophomore Class	15
Registered in the Junior Class	7
	131
To be designated "as of 1908" in the *Quinquennial*	49
	180

Twenty-six students — one in March, and twenty-five (one of whom will appear in the Quinquennial Catalogue as a member of the Class of 1908) in June — received the newly established degree of Bachelor of Science. The registration of these students was as follows: —

Senior Class	18
In Graduate School of Applied Science	2
On leave of absence for second half-year	1
Junior Class	2
Sophomore Class	2
Special Students	1
	26

Of the twenty-six students who received the new degree, twenty-two had been regularly registered in the Scientific School and were transferred to Harvard College at the beginning of the academic year when the new degree was established; one had been at one time registered in the Scientific School but had been transferred to Harvard College as a candidate for the degree of Bachelor of Arts before the establishment of the new degree; two had never been registered in the Scientific School.

The next tables show the losses and gains in the three younger classes between November, 1906, and November, 1907:—

	November, 1906.		Loss.	Gain.	November, 1907.	
Class of 1908 . .	(Juniors)	416	207	83	(Seniors)	292
Class of 1909 . .	(Sophomores)	635	253	88	(Juniors)	470
Class of 1910 . .	(Freshmen)	605	117	189	(Sophomores)	677
			577	360		

Net loss in the three classes between Nov., 1906, and Nov., 1907, 217 (92 more than in 1906).

[The discrepancy between the numbers of students in the classes as given in the foregoing table and the numbers as given in the Catalogues of the corresponding years is caused by the entrance or withdrawal of students between the time of the preparation of this table and the going to press of the Catalogue.]

	Class of 1908.	Class of 1909.	Class of 1910.	Total for three classes.
LOSSES.				
Left College before the end of the year . .	10	25	34	69
Left College at the end of the year	161	51	13	225
Were "dropped" and left College	8	40	16	64
Entered a lower class	13	85	35	133
Entered a higher class	15	52	19	86
Total loss	207	253	117	577
GAINS.				
From higher classes	2	13	85	100
From lower classes	52	19	. .	71
Newly admitted	29	56	104	189
Total gain	83	88	189	360
Net loss	124	165	. .	217
Net gain	. .	. .	72	. .

The next table shows the losses and gains in the number of Special Students since December, 1906: —

In attendance, December, 1906	263
Left College before the end of the year	36
Left College at the end of the year	71
Entered a College class	74
Total loss	181
Reëntered College as Special Students in 1907 . . .	82
Newly admitted	152
Total	234
Net loss	29

The Freshman Class in 1907–08 numbers six hundred and seven, an increase of two over the class of the preceding year: —

Admitted by examination in 1907	506
Admitted by examination before 1907	33
Admitted from another college	8
From a higher class	47
" the Special Students	11
" the Lawrence Scientific School	2
Total	607

A comparison of this table with that of last year shows one important change, — the admission directly to the Freshman Class of students from another college, a notable departure from the practice of many years. The far-reaching effect of this revival of a method once in vogue, but subsequently abandoned, should be most carefully observed and studied by the Faculty.

For several years a table appearing annually in this report has shown a steady decrease in the number of the Senior Class. In 1906–07, however, the Senior Class showed a distinct increase: —

1900–01.	1901–02.	1902–03.	1903–04.	1904–05.	1905–06.	1906–07.
1992	1983	2109	2073	2009	1899	2247
388	346	381	325	265	242	328

This increase of eighty-six in a single year, which might lead an observer at first glance to ask if a reaction toward a four-year degree had not set in, was without doubt sporadic, due, in part if not wholly, to the same causes that swelled the numbers in the College, — the transfer to the College, as candidates therein for A.B. or S.B., of students who formerly were registered in the Scientific School; for an inspection of the first table, that giving the losses and gains to November, 1907, shows that in the present year, 1907–08, when the College has practically the same number as last year, the decrease has again set in, and the Senior Class (1908) numbers but two hundred and ninety-two. An inspection of the records of these two hundred and ninety-two reveals the fact that seventeen had completed the requirements for their degrees at the end of last year, 1906–07, and that one hundred and thirty-one could have so arranged their courses as to complete the requirements at the middle of the present year: —

Work complete	17
One half-course to do	12
Two half-courses to do	14
Three half-courses to do	23
Four half-courses to do	19
Five half-courses to do	22
Six half-courses to do	41
	148

Registered in a Graduate School:	
One half-course to do	5
Two half-courses to do	3

Study of any tables that have thus far been prepared, to say nothing of the conclusions forced upon one much in contact with students, or of the establishment of the new Graduate School of Applied Science on the base of three years of undergraduate study, shows that the three-year degree is too firmly established to be shaken, and is gradually but steadily becoming the normal type.

Since this is undeniable, a lover of sound learning cannot but deprecate the attack — probably unconscious — upon the quality of the work done in College for this degree made by a vote of the Faculty, May 7, 1907, first applicable to the Class of 1912: —

> "That hereafter no extra admission subject be counted as a course or half-course towards a degree unless offered in advance as the equivalent of College work, and unless the examination book has been read with that end in view, and marked not lower than *C*."

The briefest examination of this vote is sufficient to disclose some of what I believe to be the evils it works, — the untrustworthy system of grading which it proposes; the unfortunate emphasis it lays upon marks, thereby discouraging capable schools from giving their better pupils the most liberal training, lest by forgetting some minutiae they should not secure the requisite grade; and the resulting insistence upon quantity, at the expense of quality, in the work of three and three-and-a-half-year men.

Entrance examinations are for but a single purpose, — to determine whether a student is fitted to carry on in College the work to which his training in school has been introductory — there is not, there cannot justly be, any other, and all admission examination books should be read with this single aim. Under this new system, however, a boy who offers only the twenty-six points for admission and passes, for example, Advanced French with a grade of *D*, receives credit therefor, but a second boy who offers twenty-eight points and passes the same examination with the same grade can receive no credit for it; both, however, are admitted to French 2, the course to which this training was introductory. Thus to give credit for work when it is offered for admission, and to deny credit when the work is in excess of the requirements (although in both cases a College course — French 1 — is anticipated), to adopt one system of grading in the one case and another in the second, when the real purpose of the work is the same, is to establish a double and therefore untrustworthy standard.

Again, boys taking examinations under the pressure of our present system in new, strange, and not infrequently confusing conditions, are liable to make a poor appearance. It is argued on the other side that some boys take examinations "just to see what they can do," — "that they run for luck," — but that this is done by a few is no disproof of the injustice of a double standard. Both boys should stand or fall by the result of their work in College. A new and more elaborate system of conditions is here imposed than that from which the Faculty has been trying to free itself.

Still greater, however, is the evil of the five-and-a-half and six-course yearly rate, which this new rule forces upon the three or three-and-a-half-year men who fail to secure the requisite grade in examinations passed before they enter College. Experience in the College office can lead the most ardent supporter of the six-course or the absolutely free rate to but one conclusion, — that in ninety-nine cases out of a hundred the practice is bad, not only for the individual student, but also for the general standard of instruction; and even in the hundredth case of the student who does well in all of his six courses the individual would probably be better trained, more broadly educated, if he regularly elected fewer courses. This new rule but increases the already too great demand that "everything done in College shall count for the degree," a demand which has practically brought about abandonment of the excellent old practice of taking "extra courses," — that is, of a student's listening to lectures and receiving instruction without any thought of counting directly towards a degree what is thus gained.

The new system is cumbrous, and is not unlikely to break down from its own awkward weight: even when it was proposed, its advocates admitted that exceptions to the rule would have to be made, that candidates who had done well in subjects offered in satisfaction of the necessary admission points, and ill in those offered in excess, might be allowed to shift their choice of subjects to be counted for a degree; but the Faculty even now may well consider whether in the interests of real scholarship the system should not be at once abolished.

On the other hand, two other votes relating to admission requirements

> "(*a*) That each student admitted with conditions shall be required to remove his conditions before he registers as a Sophomore."
>
> "(*b*) That students admitted with conditions in *elective* work be permitted to remove those conditions by courses in subjects other than those in which admission examinations are held."

should work much good.

The Administrative Board for the year 1906–07 was made up of Professors Willson, Parker, Ward; Messrs. Hart and Lyman; Assistant Dean Wells, his successor, Assistant Dean Castle (from the time of his appointment), and the Dean. The experience of two years with a Board small in number and practically unchanged in personnel has proved the wisdom of the change in the statute which prescribed for Harvard College a larger Board. A small committee, each member of which feels his responsibility and makes himself familiar with every important detail of business, is the most effective administrative body. That the Board has, for the two years since it was reduced in size, been practically unchanged in membership, and that all except one of its members have had long experience upon it, has enabled it to institute and carry through a definite policy: it is now generally understood throughout the College that every student, unless the case be exceptional, to be in good standing (a phrase usually interpreted by undergraduates to mean eligible to take part in public performances and contests) must maintain steadily throughout the year such a record as would, were it final, entitle him to promotion to a higher class.

During the year one student was suspended for handing in as his own work a thesis copied from a book; nineteen students had their probation closed for neglect of work, and two (Freshmen) for cheating; one Special Student, admitted on trial, was sent away on account of an unsatisfactory record.

The effect of the amendment of the rule concerning probation, that a student on probation whose record at the end of the year does not warrant his restoration to good standing shall ordinarily have his probation closed, is salutary. The usual cause for the closing of probation at the end of the year is the student's failure to win his promotion, for any student on probation who has been faithful in his attendance and who by his final grades wins his promotion to the next class is by understanding of the Board at once told that he will be relieved from probation and given a clean start for the next year. On the other hand, a student on probation who, at the end of the year, has failed to win his promotion is told (unless the case be exceptional) that under the rules his connection with the College is severed, but, also, if the case is not practically hopeless, that he may hope to secure readmission if at the beginning of the next academic year he brings evidence of some satisfactory work accomplished in the interval, and can assure the Board that, if he is readmitted, he will devote himself first of all to his studies. The evidence upon which the Board acts usually consists of satisfactory work in the Summer School which may be counted toward the degree, but testimonials from business employers are also accepted. As evidence of the salutary effect of the working of this rule may be cited the case of nineteen Freshmen who were told that their connection with the College was severed, and that they could be readmitted only by a special vote of the Board. Of these, sixteen presented evidence of satisfactory work and were allowed to return at the beginning of the present academic year.

In May, Mr. Edgar Wells, who had served since the beginning of the academic year 1905-06 as Assistant Dean, resigned that position to become General Secretary of the Alumni Association, generously agreeing, however, — in fact stipulating, — that he should continue until the end of the year to serve his successor as adviser in difficult cases already before the Board, and as a member of the Administrative Board. Valuable as are his services to the University and to Harvard men in his new and wider field, and although he will still, by his work on the Appointments Committee, be brought into contact with a large number of undergraduates, it is, nevertheless, greatly to be regretted that the College administration loses an officer of such tact, kindness, wise patience, and unceasing devotion.

One important question of routine demands the attention of the Faculty. In order that its work may be effective the Board must act promptly, but such action can be secured only with the coöperation of every instructor. For many years the Board has been hampered by the failure of teachers to return grades at the times appointed by the Faculty. Annoying and impeding as are such delays when provisional grades are called for at November, the Mid-years, and April, they are still more serious when recommendations for degrees are to be made. Never has the situation been worse than it was at Commencement, 1907. In order to reduce as much as possible the great pressure of work inevitable at that time the administrative officers had by extra work in advance so prepared the business of the Board, that, had all grades been returned at the appointed time, the Board might have voted its recommendations Thursday night before Class Day, and thus have relieved the pressure upon the Saturday following Class Day when the Faculty regularly meets to make its recommendations. Delayed returns, however, made the work of the administrative officers practically valueless. At the appointed time, forty-two returns were lacking; some of these were not received until after the Board had met.

In the return of other final grades laxity has greatly increased. According to the rule of the Faculty, all final grades must be sent to the Recorder at latest by two weeks from Commencement Day. In 1907, one thousand one hundred and nine grades were lacking at that time, and even after the final sheets had been received at the office there were, according to the Recorder's report, no less than "twenty courses in which the grades of twenty-two men were returned as provisional or incomplete, and the grades of two men without any indication whatever except a dash." "There were," the Recorder continues in his letter, "four courses in which the returns of twenty-two men were marked 'no thesis.' There were seven courses in which the grades of twelve men were reported (sic) without any indication whatever except a dash. In nearly every case these omissions necessitated the writing of a letter to the instructor and a special letter to the parent of the student concerned. I am aware that the failure to return the proper grades on the part of the instructors concerned with these men, was due largely to the negligence of the boys. I think, however, that there ought to be some specified date at which the work of the course is to be finished, and that no extensions should be given after that time."

This recommendation of the Recorder that a time be fixed, after which an instructor shall not on his own responsibility receive delayed work, should be adopted by the Faculty. (It should be noted that the cases enumerated by the Recorder do not include those of students prevented by sickness or other unavoidable hindrance from completing the work of a course. All such cases are known to the Recorder and are dealt with by him.) The hindrance to the work of the Recorder's and the Dean's offices, and the just indignation of some parents and guardians at the late date at which they receive the reports for the year need no comment. Indeed, in view of the important part work in the Summer School is taking in the cases of students making up deficiencies or completing the requirements for their degrees in advance of their classmates, the Faculty may well consider not only the best method of enforcing the present rule, but also whether it should not amend the rule by fixing an earlier date, — for example, one week from Commencement Day, or better, the end of Commencement Week itself, as the last day for returning final grades.

The number of scholars winning a position in the First Group for the academic year 1907–08 is thirty-eight; of these eleven hold honorary and twenty-seven stipendiary scholarships. In 1906–07 forty-eight students won a position in this group; eight held honorary (one of the eight was by an error awarded a scholarship in the Second Group) and forty stipendiary scholarships.

Two hundred and twenty students in 1907–08 hold scholarships in the Second Group, — eighty-seven stipendiary, one hundred and thirty-three honorary, — as compared with one hundred and fifty-eight honorary and seventy stipendiary, in 1906–07.

Commencement, 1907, saw the end of the old system of bestowing degrees with distinction; a degree with high distinction can no longer be won by a mere heterogeneous collection of grades; hereafter such a degree will be given only on recommendation of a Division, a

Department, or a special committee appointed for the purpose. The new system marks a most significant change in the attitude of the Faculty towards scholarship: the registration of candidates for the new degree seems to indicate on the part of a larger number of undergraduates than heretofore an increasing interest in real learning.

B. S. HURLBUT, *Dean.*

THE LAWRENCE SCIENTIFIC SCHOOL.

To the President of the University:—

Sir, — I have the honor to submit to you the following report on the Lawrence Scientific School and the Graduate School of Applied Science for the academic year 1906–07.

In March of the academic year 1905–06, a plan was adopted for the reorganization of the work in applied science in the University. This plan went into effect at the beginning of the year 1906–07. In brief, the reorganization established a Graduate School of Applied Science, and in the College the degree of Bachelor of Science, with the expectation that the College would thus receive a large number of students heretofore enrolled in the Lawrence Scientific School, and that the Graduate School of Applied Science would, in time, give the major part of the instruction heretofore given in the Lawrence Scientific School. Interest for the year centres in the manner in which this transition was accomplished, — in the initial enrolment of the Graduate School, in the proportion of Scientific School students to whom registration in the College was welcome, and in the gain or loss to the University as a whole as a result of the reorganization.

The initial enrolment and distribution of students in the Graduate School of Applied Science are shown in the following table: —

ENROLMENT IN THE GRADUATE SCHOOL OF APPLIED SCIENCE.

	1906–07.		1906–07.
Civil Engineering	7	Forestry	5
Mechanical Engineering	0	Applied Physics	0
Electrical Engineering	2	Applied Chemistry	1
Mining and Metallurgy	3	Applied Zoölogy	0
Architecture	7	Applied Geology	0
Landscape Architecture	4	Total	29

The above table gives the enrolment in the Graduate School of Applied Science at the time at which the Catalogue for the year went to press. During the remainder of the year, seven more students registered in the school, their distribution being as follows: —

Mining and Metallurgy	2	Chemistry	1
Mining	1	Zoölogy	1
Architecture	2		

The total enrolment in the School for the year was 36.

The numerical change in the Lawrence Scientific School, as the result of the reorganization, is shown in the following tables: —

REGISTRATION BY CLASSES IN THE LAWRENCE SCIENTIFIC SCHOOL.

Class.	1904–05.	1905–06.	1906–07.
Fifth-Year	1	6	0
Fourth-Year	92	63	56
Third-Year	66	73	35
Second-Year	138	131	68
First-Year	105	95	45
Specials	128	136	0
Totals	530	504	204

In the above table, some of the figures may be somewhat misleading. It might be inferred from the figures that all four classes are approximately the same size, that the entering is about as large as the graduating class, and that the Lawrence Scientific School may continue without further reduction in numbers. The distribution by classes does not, however, indicate in every case the length of residence. Of the 45 students indicated in that table as first-year students, 18 were not in their first year of residence, but were in their second, third, or even fourth year, retaining their registration in the first year either because of admission conditions or of failure in first-year subjects. In the year 1906–07 there were but 27 new students in the first-year class.

DISTRIBUTION OF STUDENTS IN THE FOUR-YEAR PROGRAMMES IN THE LAWRENCE SCIENTIFIC SCHOOL.

Programme.	1904–05.	1905–06.	1906–07.
Civil Engineering	68	55	34
Mechanical Engineering	57	66	37
Electrical Engineering	84	83	42
Mining and Metallurgy	67	68	20
Architecture	44	46	15
Landscape Architecture	15	17	6
Forestry	8	13	8
Chemistry	24	29	11
Geology	5	8	3
Biology	11	5	1
Anatomy and Physiology	26	24	9
Teachers of Science	23	24	12
General Science	98	66	6
Totals	530	504	204

The first two columns in the above table are taken from the similar tables in the Dean's reports for previous years. In the preparation of such tables it was the custom to distribute the special students throughout the several programmes. Inasmuch as the special students have been transferred to the College, the third column in the table is hardly comparable directly with the others. In order to make the comparison between the enrolment of this year and that of previous years, it is necessary to prepare the first and second columns so as to include only regular students. This being done, the table appears as follows: —

DISTRIBUTION OF REGULAR STUDENTS IN THE FOUR-YEAR PROGRAMMES IN THE LAWRENCE SCIENTIFIC SCHOOL.

Programme.	1904–05.	1905–06.	1906–07.
Civil Engineering	54	39	34
Mechanical Engineering	45	51	37
Electrical Engineering	62	66	42
Mining and Metallurgy	50	49	20
Architecture	29	29	15
Landscape Architecture	9	9	6
Forestry	6	8	8
Chemistry	17	19	11
Geology	1	2	3
Biology	4	2	1
Anatomy and Physiology	19	18	9
Teachers of Science	15	13	12
General Science	91	63	6
Totals	402	368	204

The greatest change, as was to be expected, was in the programme in General Science. The new S.B. degree in Harvard College removed all reason for the existence of such a group of students in the Lawrence Scientific School. Of the 66 students in General Science in the Lawrence Scientific School in the year 1905–06, 3 were special students. Of the 3, 2 did not return to the University, and 1 transferred his registration to the College. Thirteen of the students in General Science, in regular standing, graduated; 21 did not return to the University; 20 were transferred to the College, becoming candidates for the degree of Bachelor of Science; 3 were transferred to the College as candidates for the degree of Bachelor of Arts. The 6 who returned to the University, but did not transfer themselves to the College, did not do so because unable to obtain a favorable rating.

In two respects, the College requirements are more severe than the requirements of the Lawrence Scientific School. The College requires that two-thirds of the courses offered by a student in satisfaction of the requirements for a degree shall be passed with the grade of C or better; the Lawrence Scientific School requires that but half of the courses shall be passed with the grade of C or better. It has also been the custom in the Lawrence Scientific School to permit courses to count both toward the degree and toward the removal of the corresponding admission conditions, even when passed with a grade of D. In the College, only courses more advanced than the admission subjects, and only when passed with a grade of C or better, can at the same time count toward the degree and remove an admission condition. For some students these differences constitute strong inducements for continued registration in the Lawrence Scientific School, inducements of a sort not contemplated in the trial that is now being given the reorganization.

Early in the year, on recommendation of the Faculty, the Corporation voted to withdraw the programme in General Science and the programme in Anatomy and Physiology, except for students already registered in them.

It is interesting to determine whether this reorganization of the technical work in the University resulted in a net gain or loss in students to the University. To determine this the following figures show for three years the number of students enrolled in the Lawrence Scientific School one year who failed to register in the University, in any of its departments, the following year: —

In L. S. S.	in	1903–04	but not	in University	in 1904–05	181
“	“	1904–05	“	“	“ 1905–06	205
“	“	1905–06	“	“	“ 1906–07	172

It appears from this that if the reorganization had any effect, it was toward retaining in the University the students who were in the School.

The following figures in regard to special students may also be of interest in this connection: —

Special students in Havard College, 1905–06	151
Special students in Lawrence Scientific School, 1905–06	136
Total	287
Special students in Harvard College, 1906–07	263

The following figures are in regard to the new S.B. degree in Harvard College: —

Regular students candidates for the S.B. degree in Harvard College without designation of field	119
Of these by transfer from Lawrence Scientific School	72
New candidates for the S.B. degree in Harvard College	47

The following figures are in regard to students, candidates in their *first* year for the S.B. degree (with and without designation of field): —

Lawrence Scientific School	45
Harvard College	42
Total, 1906–07	87
Total, 1905–06	95

The difference between the number of first-year students for the S.B. degree in the year 1905–06 and 1906–07, the difference of eight, is more than accounted for by the number who have in previous years offered Elementary Latin in satisfaction of the requirements for admission to the Lawrence Scientific School. For example, the numbers of students offering Latin for admission to the Lawrence Scientific School in the three years just preceding are as follows: 38, 33, and 24, in the years 1903–04, 1904–05, and 1905–06, respectively. Bearing on this difference, there is also the fact that of the students in the Lawrence Scientific School who transferred to Harvard College at the beginning of the year, 33 transferred as candidates for the degree of A.B., making the average transfer per class 11.

Finally, for the first time for four years, the combined undergraduate departments showed a gain in the number of students registered, a gain of 48.

The students enrolled in the Lawrence Scientific School, in the academic year 1905–06, were, at the time of the issue of the Catalogue in the year 1906–07, distributed as follows: —

Remained in the Lawrence Scientific School			160
Graduated and did not return to the University			58
Number who did not receive degrees, but who did not return to the University (Probation closed, 8; Deceased, 2)			114
Transferred to Harvard College	Regular 105	A.B. 33	
		S.B. 72	
	Special 50		155
Returned to Graduate School of Applied Science			9
Returned to Graduate School of Arts and Sciences			3
Returned to Harvard Medical School			4
Returned to the Bussey Institution			1
Total			504

The number of students in the Lawrence Scientific School in the year 1904–05 who did not receive degrees, but who did not return to the University in the year 1905–06, was 131.

The above figures were those existing at the time at which the Catalogue went to press. Before the end of the year 8 more students transferred to Harvard College.

The above tables show that from almost any point of view there was no net loss in the University by the reorganization.

During the year 1906–07 the degree of Bachelor of Science was conferred in the following fields in the Lawrence Scientific School: —

Civil Engineering	10	Forestry	2
Mechanical Engineering	13	Chemistry	3
Electrical Engineering	9	Geology	1
Mining and Metallurgy	2	Anatomy and Physiology	4
Architecture	5	Science for Teachers	1
Landscape Architecture	1	General Science	2
Total			53

In the Graduate School of Applied Science, the following degrees were conferred: —

Master in Civil Engineering	2
Mining Engineer	1
Master in Architecture	2
Master in Landscape Architecture	1
Master in Forestry	2
Total	8

At the present time the work in engineering is in great need of financial support. The large number of students taking these subjects tax to the utmost the capacity of the laboratory facilities and the strength and time of the instructing staff. The fact that the subjects of civil, mechanical, and electrical engineering are pursued by a large number of students in the technical schools throughout the country and the fact that the majority of the inquiries received are in regard to engineering indicate that an increase in the material resources for instruction in these subjects and in the staff of instructors would be a particularly wise investment from the standpoint of increasing attendance. Engineering subjects are generally regarded as typical of the work of a school in applied science, and the support they receive and the manner in which they are handled go far to establish its standing.

WALLACE C. SABINE, *Dean*.

ATHLETIC SPORTS.

To the President of the University:—

Sir,—I have the honor to submit to you a report for the academic year 1906–07 on the work of the Committee on the Regulation of Athletic Sports.

I. Organization.

The Joint Committee of the Corporation and Overseers appointed in May, 1906, to consider and report on the whole subject of the regulation of Athletic Sports, presented its conclusions in February, 1907; and in March, 1907, the recommendations of the joint committee were adopted and some changes were made in the organization of the Athletic Committee. Owing to the uncertainty which prevailed regarding the outcome of the above inquiry, the Athletic Committee was unable to continue the development of the plans which it had been considering for the betterment of athletics, and confined its attention chiefly to a policy of temporary administration.

II. Equipment.

For the above reason the work of the improvement of Soldier's Field has been arrested, with the exception of some unavoidable repairs to the base-ball stands, and the laying out of sixteen tennis courts rendered necessary by loss of courts arising from the erection of the law school building on Holmes Field. As the Committee is now instructed to apply the entire surplus of athletic receipts, beyond the sums needed for current athletic expenses, to the extinguishment of the debt on the Stadium until that is paid, while the further development of the Field is to be "gradual," it is likely that legitimate intramural college athletics will continue to be greatly hampered, unless some new and generous donor should arise and complete the task so liberally begun.

To illustrate: Among the college games cricket is conducted on an entirely amateur basis. By the constitution of the cricket league, even the collection of gate money has been prohibited. The Cricket Team was obliged to disband this year because the new tennis courts encroached on the cricket territory, while no fresh land had been reclaimed to provide for the latter sport, and no funds were available to secure grounds elsewhere. Owing to the same lack of playing territory, the Leiter Cup base-ball series was given up for the Spring term. This series of impromptu matches bears the same relation to base-ball as the dormitory races to rowing, namely, it affords to students of only average prowess a pleasant and healthful opportunity for informal exercise and competition. To provide and enlarge opportunities for such informal and local sport has been one of the leading aims of the Committee. It would be unfortunate if this aim should be thwarted by a policy of delay and deliberation in the utilization of Soldier's Field, much of the splendid expanse of which is at present absolutely useless.

In the Locker Building a room has been set aside for the use of the Track Team, similar to the crew room in the University boat-house. The funds for furnishing were raised outside. Attractive plans for a new base-ball stand, to be composed of brick, concrete, and steel, have been submitted by Professor H. J. Hughes. This sightly and useful structure will cost about $100,000 and awaits its donor. Meanwhile the present iron and wooden framework is annually patched, and not too efficiently protected from fire by Babcock hand extinguishers and a chemical engine.

The new Weld boat-house described in my last report has been completed, and is to be formally opened at the beginning of the academic year 1907–08.

III. Finances.

The actual cost of the Stadium proper to date has been a little under $300,000 (see President's Report, 1905–06, p. 121).

On July 1, 1907, a payment of $20,000 was made on the debt, which with the interest amounted on August 1, 1907, to $31,015.25.

The tables which follow form a continuation of those published in the Report for 1905–06 (pp. 122–125).

HARVARD ATHLETIC ACCOUNTS.

Receipts.

	1903–04.	1904–05.	1905–06.	1906–07.
Freshman Foot-Ball . . .	$1,143.67	$1,301.75	$1,148.75	$1,395.35
Freshman Base-Ball . . .	892.40	1,289.85	1,208.98	1,120.91
Freshman Crew	2,224.10	2,107.89	1,927.38	1,575.25
Athletic Assoc'n, Track Team	5,968.63	4,986.31	6,721.26	4,150.76
Foot-Ball Association . . .	72,569.81	68,657.10	85,335.66	64,950.14
Base-Ball Association . . .	16,674.08	16,952.56	15,893.28	18,506.89
Lawn Tennis Association .	154.50	151.50	202.50	236.25
Cricket Club	155.25	317.00	......	......
Boat Club	3,375.75	3,354.60	2,926.00	2,962.65
Lacrosse Association. . . .	562.47	835.05	589.50	246.45
Second Nine, College Nine .	273.04	171.50	......	184.00
Weld Boat Club	850.50	924.00	835.00	842.00
Newell Boat Club	1,096.30	954.55	1,301.00	1,418.00
Freshman Basket-Ball . . .	174.90	130.00	75.78	145.50
Basket-Ball Team	600.70	980.25	1,326.25	1,414.47
Hockey Club	1,088.90	1,483.00	1,629.64	2,901.72
Fencing Team	143.48	83.40	317.77	435.57
Lawn Tennis Courts . . .	2,618.60	3,169.90	3,560.14	3,272.70
Gymnastic Team	127.00	......	......	......
Freshman Hockey.	151.05	47.85	8.50	......
Jiu Jitsu	......	57.50	......	......
Hand-Ball	......	2.64	......	......
Second Basket-Ball	......	94.92	......	102.40
Freshman Lacrosse	......	18.50	......	116.84
Association Foot-Ball . . .	......	......	95.25	83.65
Swimming Team	......	......	131.07	63.60
	110,845.13	108,071.62	125,233.71	106,125.10

HARVARD ATHLETIC ACCOUNTS.

EXPENSES.

	1903–04.	1904–05.	1905–06.	1906–07.
Freshman Foot-Ball . . .	$830.58	$1,329.36	$1,259.79	$1,689.32
Freshman Base-Ball . . .	851.84	1,314.25	1,049.95	905.25
Freshman Crew	3,092.46	2,621.57	2,617.05	2,609.69
Athletic Assoc'n, Track Team	6,522.25	6,625.46	7,065.32	8,325.11
Foot-Ball Association . . .	15,346.51	17,424.78	29,627.87	24,216.50
Base-Ball Association . . .	12,638.89	11,564.36	10,356.19	10,161.37
Lawn Tennis Association .	274.76	179.75	292.01	441.17
Cricket Club	479.28	431.46	. . . . . .	. . . . . .
Boat Club	9,857.47	10,147.97	11,266.51	10,356.06
Lacrosse Association. . . .	1,109.97	1,205.81	803.29	567.90
Freshman Lacrosse Assoc'n	. . . . . .	. . . . . .	75.00	. . . . . .
Second Nine, College Nine .	347.41	307.01	167.72	379.41
Weld Boat Club	2,739.92	2,618.12	4,165.97	2,841.91
Newell Boat Club	2,502.89	2,800.29	1,889.32	2,572.67
Freshman Basket Ball . . .	150.95	137.65	75.78	131.77
Basket-Ball Team	818.53	1,029.55	1,480.69	1,643.04
Hockey Club	1,310.99	1,463.14	1,698.61	2,171.69
Fencing Team	644.11	82.00	421.66	435.57
Lawn Tennis Courts . . .	1,485.81	1,791.27	2,160.04	1,768.07
Gymnastic Team	183.08	34.00	. . . . . .	51.24
Freshman Hockey.	151.05	46.85	29.00	. . . . . .
Jiu Jitsu	. . . . . .	167.50	. . . . . .	. . . . . .
Hand-Ball	. . . . . .	52.64	. . . . . .	. . . . . .
Second Basket-Ball	. . . . . .	66.69	. . . . . .	110.80
Freshman Lacrosse	. . . . . .	. . . . . .	. . . . . .	50.00
Association Foot-Ball . . .	. . . . . .	45.64	85.50	193.10
Swimming Team	. . . . . .	. . . . . .	103.62	92.50
	61,338.55	63,487.12	76,690.89	71,714.14

HARVARD ATHLETIC ACCOUNTS.

SUBSCRIPTIONS.

	1903-04.	1904-05.	1905-06.	1906-07.
Freshman Foot-Ball . . .	$928.20	$1,019.25	$1,025.25	$1,133.10
Freshman Base-Ball . . .	633.81	894.15	981.84	835.75
Freshman Crew	2,224.10	2,107.89	1,927.38	1,575.25
Athletic Assoc'n, Track Team	2,019.61	1,697.00	1,947.75	1,873.80
Foot-Ball Association . . .	......	......	......	......
Base-Ball Association . . .	......	......	......	......
Lawn Tennis Association .	......	......	......	......
Cricket Club	155.25	317.00	......	......
Boat Club	1,623.75	2,028.60	1,052.00	681.50
Lacrosse Association. . . .	349.47	312.00	158.40	146.45
Freshman Basket-Ball . . .	138.25	130.00	75.78	21.50
Basket-Ball Team	262.50	473.25	943.50	289.50
Hockey Club	492.50	889.50	934.65	1,895.08
Fencing Team	110.50	62.50	287.77	435.57
Freshman Hockey.	151.05	47.85	8.50	......
Jiu Jitsu	......	57.50	......	......
Hand-Ball	......	2.64	......	......
Freshman Lacrosse	......	18.50	......	116.84
Association Foot-Ball . . .	......	......	62.00	73.00
Swimming Team	......	......	131.07	38.60
	9,088.99	10,057.63	9,535.89	9,115.94

HARVARD ATHLETIC ACCOUNTS.

TRAINING TABLES.

	1903-04.	1904-05.	1905-06.	1906-07.
Freshman Foot-Ball . . .	$143.95	$195.97	$312.31	$234.28
Freshman Base-Ball . . .	229.60	337.69	245.72	130.15
Freshman Crew	16.49	......	58.76	......
Athletic Assoc'n, Track Team	1,235.12	904.34	1,203.34	994.20
Foot-Ball Association . . .	2,474.89	2,101.08	4,096.39	2,626.48
Base-Ball Association . . .	2,026.81	1,882.86	1,176.87	753.85
Boat Club	1,128.00	1,134.07	614.60	882.53
Lacrosse Association. . . .	191.10	183.42	......	......
College Nine	......	94.60	......	......
Basket-Ball Team	101.50	......	......	219.53
Hockey Club	203.12	267.88	332.07	444.40
	7,750.58	7,101.91	8,040.06	6,285.42

These tables exhibit some variations in expenditure. The foot-ball budget, which was $17,424.78 in 1904, rose to $29,627.87 in 1905, and receded in 1906 to $24,216.50. It is expected that the season of 1907 will show a still further reduction.

IV. BRANCHES OF ATHLETICS.

The branches of athletics under the direction of the Committee remain essentially the same as last year. Those organizations whose participation in intercollegiate contests during the current year entitled each to an elector for choosing the three undergraduate members of the Athletic Committee were: Association foot-ball, base-ball, basket-ball, fencing, foot-ball, golf, the Gun Club, gymnastics, hockey, lacrosse, rowing, swimming, tennis, and track athletics. The branches not so entitled were cricket, hand-ball, and the Rifle and Pistol Club.

The sport of polo has recently been taken up by some Harvard students, but no formal organization has yet been made. In rowing the plan of dormitory races was satisfactorily continued, and an increased number of crews took part. The experiment of a professional coach for the University squad was continued for a third season with reasonably acceptable results, considering the unavoidable mishaps of the season. It may be remarked that Harvard is not at present committed to this method of coaching beyond the annual decision of the Committee and the crew management.

In base-ball strong pressure was brought to bear upon the Committee to sanction the employment of a professional player as coach with full charge of the team. The principal argument appeared to be that Harvard's chief opponent had adopted this system. The request was twice denied by a close vote. The base-ball management cheerfully accepted the decision and secured a Harvard graduate as head coach, who was paid a small sum for his loss of time in the law office with which he was connected. To some this arrangement may seem to savor quite as much of professionalism as the one denied. As a result, the nine, although composed of young material, won its chief series, and, what was far more important, its *morale* was admirable.

The interest in track athletics continued strong. The team won its chief event; and also the Stadium was again the scene of a remarkable and successful general intercollegiate meet.

By vote of the Corporation and Overseers (May 7 and 9, 1906; see also President's Report for 1905–06, pp. 126–128) the Athletic Committee was "authorized to permit, during the year of 1906, but not later than December 1, 1906, games of intercollegiate foot-ball under the new rules, upon such terms and conditions as said Committee on the Regulation of Athletic Sports shall consider advisable in order to test the expediency of continuing intercollegiate foot-ball"; and the following vote was also adopted by the Board of Overseers: "That in the opinion of this Board many of the unsatisfactory conditions attending intercollegiate foot-ball have been exaggerated by an unwillingness on the part of the officials charged with the enforcement of the rules on the field to assert their authority, and therefore this Board requests the Committee on the Regulation of Athletic Sports to formulate, if possible, some more satisfactory plan for the election of such officials than the one now in vogue."

These votes placed a burdensome responsibility upon the Committee, as a close supervision of the whole foot-ball season was implied. This duty the Committee endeavored to fulfil. The appointments of officials were submitted for its approval, and the practice and the actual contests carefully observed. Although the difficult element of intimate personal collision still continued a prominent feature of the game, the outcome of the season proved that foot-ball could be played in a sportsmanlike manner, even where there was a spirit of keen competition and in the presence of intensely partisan spectators. That the primal objections to the present game can ever be entirely removed is improbable.

The interest in the minor sports as a whole showed considerable increase, and a vigorous effort was made by the various managements to render them self-supporting. To encourage this effort, the Committee adopted the policy of appropriating any surplus in a branch in one season for the benefit of the following management, instead of turning such surplus back into the general fund.

When the minor sports began to attract more attention fear was expressed (see President's Reports, 1902–03, pp. 40–41; and 1903–04, p. 122) that the athletic season might become continuous throughout the academic year. This has now become a fact. At first those taking part constituted fairly distinct groups, but as the minor sports gained in importance the natural tendency was to draft off more of the tested athletes from the major branches for use in the winter sports. In anticipation of this very tendency, the Committee in October, 1904, passed a rule limiting individual participation in intercollegiate athletics to two periods of sport in any one academic year. This rule simply indicated the unwillingness of the Committee to countenance the continued devotion to athletics, and the amount of absenteeism involved in membership on some University athletic team during the whole academic year. The rule applies only to intercollegiate, not to interclass or intramural contests, and was not designed to prevent men from taking any amount of exercise desired.

It may surprise many to learn that probably no regulation of the Committee has been attacked so severely and generally by the undergraduate body as this seemingly reasonable restriction, reasonable, at least, from the standpoint of the teacher and in most cases of the parent. The college press printed the arguments on both sides. The controversy illustrates once more the difficulty of regulating conduct by rule.

V. LEGISLATION.

The Committee held twenty-two meetings during the academic year, as compared with twenty-four meetings in 1905–06.

Considerable trouble has been experienced in keeping foot-ball tickets for the Harvard and Yale games out of the hands of speculators, although these tickets are sold only to Harvard and Yale men. The athletic authorities at both universities have taken strict methods to prevent speculation in such tickets, and in some cases the names have been published of persons whose tickets were found in the hands of speculators, while a number of tickets were replevined from the possession of speculators themselves. A list of the men whose tickets for the 1906 game were thus traced was made, with the evidence appended, and the whole matter was referred to the Committee on Tickets for 1907, in order that that Committee might use its discretion about issuing tickets to any on the list who might apply again.

The cups, banners, and other trophies which were formerly stored in the gymnasium have been transferred to a room in the Union and duly installed. The Trophy Room Committee was authorized to take measures to preserve the various banners which were falling into a state of decay.

An application of representatives of some of the minor sports, requesting that specific appropriations be made for such branches, and that the collection of subscriptions be discontinued, was denied. The whole question of subscriptions and of the treatment of the minor branches must, however, be considered to be in a transitional stage.

Owing to the uncertainty regarding the future of Harvard athletics, notice was sent to Yale that for the present Harvard would be unable to renew the two-year agreement which expired in March, 1907. By joint action, however, contests occurring since have been held subject to said agreement.

On account of the increasing number of requests from outsiders to use the university athletic equipment, the Committee has passed a general regulation that no such requests would be granted. In a few special cases this rule was suspended with the approval of the Corporation. A standing exception is the use of the tennis courts by outsiders during the summer vacation.

The Committee declined an invitation to join the new National Intercollegiate Athletic Association, although sympathizing with the aims of that organization, aims which Harvard has pursued for many years.

HORATIO S. WHITE, *Chairman.*

THE GRADUATE SCHOOL OF ARTS AND SCIENCES.

To the President of the University: —

Sir, — As Acting Dean, in the absence of Dean Wright, I have the honor to submit a report on the School for the academic year 1906–07.

The members of the Administrative Board were Professors Mark, G. F. Moore, H. W. Smyth, Kittredge, Münsterberg, Sabine, Bôcher, Gay, and Walz, and the Acting Dean. Professors Gay and Walz were members for the first time. Early in the year Professor Bôcher resigned his office as secretary to the Board, and Professor Walz was elected in his place. The Board met thirteen times in the course of the year.

In this report I shall first present, with brief comments, the customary tables, in which the condition of the School is set forth in tabular form; then lists of the Doctors of Philosophy and Fellows of 1906–07, with a statement of their present occupations; following these by certain remarks in regard to new scholarships and fellowships, the assignment of fellowships and scholarships, the requirements for degrees, and, finally, the entity of the School.

Table I, to which Tables II, III, and IV are supplementary, shows the number of students in the School, resident and non-resident; their subjects of study; length of residence; and the numbers of those who hold or do not hold the Harvard first and second degrees. It shows practically no change in total membership; the largest proportion yet recorded of resident students doing full work for the whole year; and the highest percentages of students holding no Harvard degree, and of students holding no Harvard first degree in Arts and Sciences, in the history of the School. Of two hundred and twenty-eight first-year students, one hundred and forty-seven, or sixty-four per cent., came from colleges other than Harvard.

Table V gives a list of colleges and universities represented by four or more graduates in the School: twenty-four in 1906–07, as against seventeen in 1905–06.

Table VI, Birthplaces of Graduate Students, shows that less than one-third of our students are of New England nativity, and that nearly one-sixth are foreign born.

The Administrative Board of the School has general charge, under the Faculty of Arts and Sciences, of the administration of the higher degrees of Doctor of Philosophy, Doctor of Science, Master of Arts, and Master of Science, and makes recommendations to the Faculty for these degrees. Table VII shows the number of recommendations* for the higher degrees in 1905, 1906, and 1907. Table VIII gives the number of recommendations for 1907, classified according to the Divisions and Departments of the Faculty. The decrease in recommendations for the degree of Master of Arts in professional studies is particularly gratifying. It is to be hoped that, whether by enactment or by natural evolution, the anomaly of granting this degree by the Faculty of Arts and Sciences on ordinary professional studies under other Faculties will be brought to an end.

Table IX presents the usual statistics as to the assignment of fellowships and scholarships.

TABLE I. — NUMBER AND CLASSIFICATION OF STUDENTS.

	1904–05.		1905–06.		1906–07.	
I. Resident Students doing full work in the School for the whole academic year . . .	273		260		281	
Resident Students not doing full work or not working for the whole year as Resident Students	105	378	133	393	105	386
Non-Resident Students holding fellowships .	15		16		21	
Non-Resident Students not holding fellowships	2	17	0	16	0	21
II. Students whose studies lay chiefly in †						
i. Semitic Languages and History	2		2		0	
ii. Ancient Languages (Classics and Sanskrit)	34		35		29	
iii. Modern Languages (including Comparative Literature)	96		112		106	
iv. History and Political Science	86		82		89	
v. Philosophy	52		40		32	
vi. Education					24	
vii. Fine Arts (including Architecture) . . .	19		13		5	
viii. Music	4		9		5	
ix. Mathematics	14		13		24	
x. Physics	14		12		9	
xi. Chemistry	27		39		37	
xii. Engineering	3		10		5	
xiii. Forestry					1	
xiv. Biology	20		22		17	
xv. Geology	14		10		9	
xvi. Mining and Metallurgy					1	
xvii. Anthropology	5		3		5	
Unclassed Students	5	395	7	409	9	407

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* The number of persons recommended each year, and that of the men who actually receive the degree, as published in the Annual Catalogue, do not always agree. Usually a few of the candidates recommended do not receive the degree at once. The degree is in these cases ordinarily conferred in a later year, "as of" the year in which the recommendation was made.

† For detailed statistics as to the number of Graduate Students enrolled in the various courses of instruction offered by the Faculty of Arts and Sciences, see the Report of the Dean of that Faculty, pp. 57–89.

		1904–05.		1905–06.		1906–07.	
III.	First-year Students	237		220		228	
	Second-year Students	92		109		87	
	Third-year Students	45		54		54	
	Fourth-year Students	18		16		29	
	Students in a fifth or later year	3		10		9	
			395		409		407
IV.	A.B.'s and S.B.'s of Harvard University and of no other institution	124		126		120	
	A.B.'s and S.B.'s (and holders of similar degrees) of other institutions and also of Harvard University	15		20		15	
	Students not holding the Harvard degree of A.B. or S.B.	256		263		272	
			395		409		407
V.	Students holding the Harvard degree of A.M., S.M., Ph.D., or S.D.	95		103		101	
	Students holding the Harvard degree of A.B. or S.B., but not of A.M., S.M., Ph.D., or S.D.	94		92		81	
	Students holding no Harvard degree in Arts, Philosophy, or Science	206		214		225	
			395		409		407

TABLE II. — PERCENTAGE OF STUDENTS IN THEIR FIRST AND FOLLOWING YEARS: 1901–07.

	1901–02.	1902–03.	1903–04.	1904–05.	1905–06.	1906–07.
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
First-year Students	50	54	61	60	53	56
Second-year Students	26	26	21	24	26	21
Third-year Students	12	11	12	11	13	14
Fourth-year Students and Students of longer residence	12	9	6	5	8	9

TABLE III. — PERCENTAGE OF STUDENTS FROM OTHER COLLEGES.

	1897–98.	1898–99.	1899–1900.	1900–01.	1901–02.	1902–03.	1903–04.	1904–05.	1905–06.	1906–07.
Percentage of Students holding no Harvard degree	40	41	44	44	40	46	46	52	52	55
Percentage of Students holding no Harvard first degree in Arts or Sciences	55	55	61	62	56	62	59	65	64	67

TABLE IV. — RESIDENT STUDENTS DOING FULL WORK, AND NON-RESIDENT STUDENTS: 1887–1907.

	1887–88.	1888–89.	1889–90.	1890–91.	1891–92.	1892–93.	1893–94.	1894–95.	1895–96.	1896–97.	1897–98.	1898–99.	1899–1900.	1900–01.	1901–02.	1902–03.	1903–04.	1904–05.	1905–06.	1906–07.
Resident Students doing full work in the School for the whole academic year .	48	50	62	62	108	127	162	161	175	194	171	218	227	226	218	216	289	273	260	281
Resident Students not doing full work or not working for the whole year as Resident Students	36	39	34	55	79	73	86	94	105	96	107	103	99	113	86	94	123	105	133	105
Whole number of Resident Students .	84	89	96	117	187	200	248	255	280	290	278	321	326	339	304	310	412	378	393	386
Non-Resident Fellows	10	9	11	11	9	9	10	12	13	14	15	12	13	14	11	15	14	15	16	21
Other Non-Resident Students	3	1	4	4	4	7	1	5	6	2	. .	3	2	. .	. .	. .	1	2	. .	. .
Whole number of Non-Resident Students	13	10	15	15	13	16	11	17	19	16	15	15	15	14	11	15	15	17	16	21
Whole number of students	97	99	111	132	200	216	259	272	299	306	293	336	341	353	315	325	427	395	409	407
Percentage of Resident Students doing full work for whole academic year .	57	56	65	53	58	64	65	63	63	67	62	68	70	67	72	70	70	72	66	73

TABLE V. — COLLEGES AND UNIVERSITIES REPRESENTED BY FOUR OR MORE GRADUATES IN THE SCHOOL: 1902–03, 1903–04, 1904–05, 1905–06, 1906–07.

1902–03.		1903–04.		1904–05.		1905–06.		1906–07.	
Harvard,	174	Harvard,	232	Harvard,	192	Harvard,	197	Harvard,	185
Brown,	11	Amherst,	14	Ohio Wesleyan,	14	Brown,	12	Dartmouth,	10
Amherst,	10	Brown,	12	Dartmouth,	9	Ohio Wesleyan,	12	Boston Univ.,	8
Bowdoin,	7	Dartmouth,	12	Amherst,	8	Michigan,	10	Toronto,	8
Dartmouth,	7	Michigan,	10	Williams,	8	Amherst,	8	Amherst,	7
Chicago,	7	Yale,	9	Brown,	7	Yale,	8	Columbia,	7
Michigan,	7	Ohio Wesleyan,	8	Yale,	6	Boston Univ.,	7	Yale,	7
Columbia,	6	Bowdoin,	7	Boston Univ.,	5	Williams,	7	Michigan,	6
Leland Stanford Jr.,	6	Haverford,	7	Bowdoin,	5	Cornell Univ.,	6	Vanderbilt,	6
Northwestern,	6	Williams,	7	Cornell Univ.,	5	Dartmouth,	6	Bowdoin,	5
Tufts,	6	Tufts,	6	Haverford,	5	Haverford,	5	California,	5
California,	6	West Virginia,	6	Leland Stanford Jr.,	5	Chicago,	4	Cornell Univ.,	5
Yale,	6	Boston Univ.,	5	State Univ. of Iowa,	5	Columbia,	4	Haverford,	5
Haverford,	5	Columbia,	5	Michigan,	5	Dalhousie,	4	Indiana,	5
Ohio Wesleyan,	5	Texas,	5	Rochester,	5	Indiana,	4	Kansas,	5
Trinity (Conn.),	5	Leland Stanford Jr.,	4	Toronto,	5	Rochester,	4	Missouri,	5
Texas,	5	Trinity (Conn.),	4	Bates,	4	Vanderbilt,	4	Queen's,	5
Beloit,	4	California,	4	Missouri,	4			Rochester,	5
New York,	4	Pennsylvania,	4	Pennsylvania,	4			Acadia,	4
Williams,	4	Toronto,	4	Vanderbilt,	4			Brown,	4
Wofford,	4	Wesleyan (Conn.),	4					Chicago,	4
								Ohio Wesleyan,	4
								Princeton,	4
								State Univ. of Iowa,	4
Total Membership,	325		427		395		409		313

TABLE VI. — BIRTHPLACES OF GRADUATE STUDENTS: 1899–1907.

	1899–1900.	1900–01.	1901–02.	1902–03.	1903–04.	1904–05.	1905–06.	1906–07.
Students born in the New England States	122	127	107	122	168	132	149	131
Students born in other Northern States east of the Mississippi River	119	136	109	108	141	142	135	148
Students born in Southern States east of the Mississippi River	17	16	11	14	31	21	20	21
Students born in States west of the Mississippi River . . .	34	30	39	39	35	42	44	44
Students born in the Dominion of Canada	23	21	22	16	17	19	24	28
Students born in other foreign countries	26	23	27	26	35	39	37	35
Total number of students	341	353	315	325	427	395	409	407
Percentage of students born in New England	36	36	34	38	39	33	37	32
Percentage of students born elsewhere	64	64	66	62	61	67	63	68

TABLE VII. — RECOMMENDATIONS FOR DEGREES IN 1905–07.

	1905.		1906.		1907.	
I. Graduate Students recommended for A.B. . .	2		1		0	
Graduate Students recommended for A.M. . .	106		85		120	
Graduate Students recommended for S.M. . .	4		3		2	
Graduate Students recommended for Ph.D. .	38		44		31	
Graduate Students recommended for S.D. . .	0	150	0	133	1	154
II. College Seniors recommended for A.M. . . .	0		1		0	
College Seniors of a preceding year, recommended for A.M. on work done in Senior year	26		15		1	
College Juniors of a preceding year, recommended for A.M. on work done in Junior year	0		1		1	
Professional students recommended for A.M. on special courses of study	10		16		8	
Professional students recommended for Ph.D. on special courses of study	1	37	2	35	2	12
Total of the above list		187		168		166
Deduct Graduate Students recommended for A.B.		2		1		0
Total number recommended for A.M., S.M., Ph.D., and S.D.		185		167		166

	1905.		1906.		1907.	
III. Harvard Bachelors of Arts or Science, not previously graduated elsewhere	78		63		66	
Harvard Bachelors of Arts or Science, previously graduated elsewhere	3		6		8	
Students not Harvard Bachelors of Arts or Science	104	185	92	167	92	166

TABLE VIII. — DIVISIONS AND DEPARTMENTS IN WHICH RECOMMENDATIONS FOR THE HIGHER DEGREES WERE MADE IN 1906.

DIVISION.	DEPARTMENT.	DEGREES. A.M.		S.M.		PH.D.		S.D.	
I.	Semitic Languages and History	..		..		..		..	
II.	Ancient Languages:								
	Indic Philology	..		..		..		..	
	The Classics (Greek, Latin)	10		..		4		..	
	Total in Ancient Languages	—	10	—	..	—	4	—	..
III.	Modern Languages:								
	English	24		..		6		..	
	Germanic Languages and Literatures	4		..		3		..	
	French, and other Romance Languages and Literatures	4		..		1		..	
	Comparative Literature	..		..		..		..	
	In more than one Department	3		..		..		..	
	Total in Modern Languages	—	35	—	..	—	10	—	..
IV.	History and Political Science:								
	History and Government	18		..		3		..	
	Political Economy	5		..		1		..	
	Total in Hist. and Political Sci.	—	23	—	..	—	4	—	..
V.	Philosophy		18		..		5		..
VI.	Education		9		..		..		..
VII.	The Fine Arts:								
	History and Principles of the Fine Arts	1		..		..		..	
	Architecture	..		..		..		..	
	Total in the Fine Arts	—	1	—	..	—	..	—	..
VIII.	Music		3		..		..		..
IX.	Mathematics		8		..		1		..
X.	Physics		1		..		1		..
XI.	Chemistry		9		1		2		..
XII.	Engineering		..		..		..		..
XIII.	Forestry		1		..		..		..
XIV.	Biology:								
	Botany	..		..		1		..	
	Zoölogy	2		1		3		1	
	Total in Biology	—	2	—	1	—	4	—	1

Division.	Department.	Degrees. A.M.	S.M.	Ph.D.	S.D.
XV. Geology:					
	Geology and Geography	1	..	..	..
	Mineralogy and Petrography	..	..	..	..
	Total in Geology	1	..	..	..
XVI. Mining and Metallurgy		1	..	..	..
XVII. Anthropology		1	..	..	..
In more than one Division		4	..	..	..
Professional Students:					
	Divinity School	6	..	2	..
	Law School	1	..	..	..
	Medical School	1	..	..	..
	Total	130	2	33	1

TABLE IX. — FELLOWSHIPS AND SCHOLARSHIPS (1905–08).

1. *Applications and Appointments.*

	1905–06.		1906–07.		1907–08.	
Spring applicants for reappointment or promotion	46		57		48	
Spring applicants for a first appointment	211		222		233	
Later applicants	44	301	44	323	39	320
Appointed to fellowships	21		27		23	
Appointed to scholarships	54		61		73	
Appointed instructors, teaching fellows, or assistants	25	100	28	116	26	122
Deduct for repetitions		2		7		5
		98		109		117
Entered or continued in the Graduate School of Arts and Sciences without receiving any of the above-named appointments	38		50		50	
Entered undergraduate classes of Harvard College	1		2		3	
Entered other Departments of the University	1	40	3	55	2	55
Applicants who were at the University in the year following their applications		138		164		172
Applicants not at the University in that year		163		159		148
		301		323		320

2. *Classification of Applicants and Appointees.*

	1905–06.		1906–07.		1907–08.	
	Applicants.	Appointees.	Applicants.	Appointees.	Applicants.	Appointees.
Students of Philology	122	25	124	28	130	32
Students of Philosophy, History, or Political Science	85	21	105	28	91	28
Students of Mathematics, Physics, and Chemistry	61	15	62	15	64	21
Students of Natural History	25	11	22	10	26	10
Students of other branches, or unclassified	8	3	10	7	9	5
	301	75	323	88	320	96
Students in Graduate School of Arts and Sciences	99	50	103	45	91	40
Students in Harvard College	19	3	23	5	28	10
Students in other Departments of the University	3	2	6	2	7	3
Former students in some Department of the University	26	2	31	12	35	15
Persons never previously members of the University	154	18	160	24	159	28
	301	75	323	88	320	96
Harvard Bachelors of Arts or Science, not previously graduated elsewhere	36	16	39	18	32	16
Harvard Bachelors of Arts or Science, previously graduated elsewhere	14	3	8	3	9	5
Graduates of other institutions, not Harvard Bachelors of Arts or Science	209	50	220	58	234	58
Undergraduates of Harvard College or Lawrence Scientific School, not already graduated elsewhere	22	5	29	8	26	10
Undergraduates of other institutions and other non-graduates	20	1	27	1	19	7
	301	75	323	88	320	96

The degree of Doctor of Philosophy was conferred upon the thirty-three men named below. With each name is indicated the subject and the special field in which the degree was taken, the candidate's academic degrees, the subject of his thesis, and his present occupation. Of the thirty-three, twenty-four are now teaching in colleges, and one in a secondary school; six are continuing their studies, five as travelling fellows in Europe; one is a clergyman, and one a librarian.

Edward Larrabee Adams, A.B. 1900, A.M. 1901.
Subject, Philology. *Special Field*, Romance Philology. *Thesis*, "Word Formation in Provençal." Instructor in Romance Languages, University of Michigan.

John Mead Adams, A.B. 1903, A.M. 1905.
Subject, Physics. *Special Field*, Radiation. *Thesis*, "The Transmission of Röntgen Rays through Metallic Sheets." Assistant in Physics at this University.

Arthur Mangun Banta, A.B. (*Indiana Univ.*) 1903, A.M. (*ibid.*) 1904.
Subject, Biology. *Special Field*, Zoölogy. *Thesis*, "A Comparison of the Reactions of a Species of Terranean with those of a Species of Subterranean Isopod." Associate Professor of Biology, Marietta College.

Marshall Albert Barber, A.B. (*Univ. of Kansas*) 1891, A.B. (*Harvard Univ.*) 1892, A.M. (*ibid.*) 1894.
Subject, Biology. *Special Field*, Botany. *Thesis*, "On Heredity in certain Microörganisms." Associate Professor of Cryptogamic Botany and Bacteriology, University of Kansas.

Joseph Warren Beach, A.B. (*Univ. of Minnesota*) 1900, A.M. (*Harvard Univ.*) 1902.
Subject, Philology. *Special Field*, English Philology. *Thesis*, "The Loathly Lady: A Study in the Popular Elements of the Wife of Bath's Tale." Assistant Professor of English, University of Minnesota.

Ernest Bernbaum, A.B. 1902, A.M. 1905.
Subject, Philology. *Special Field*, English Philology. *Thesis*, "The Origin and Influence of Sentimental and Domestic Drama in England and in France." Instructor in English at this University.

Charles Scott Berry, A.B. (*Hiram Coll.*) 1903, A.M. (*Harvard Univ.*) 1905.
Subject, Philosophy. *Special Field*, Psychology. *Thesis*, "An Experimental Study of Imitation in Animals." Continuing his studies at Berlin, as James Walker Fellow.

William Charles Brenke, S.B. in Chem. (*Univ. of Illinois*) 1896, S.B. in Math. and Astron. (*ibid.*) 1897, S.M. (*ibid.*) 1899.
Subject, Mathematics. *Special Field*, Analysis. *Thesis*, "A Contribution to the Theory of Trigonometric and Zonal Harmonic Series." Adjunct Professor of Mathematics, University of Nebraska.

Sereno Burton Clark, A.B. (*Univ. of Michigan*) 1901.
Subject, Philology. *Special Field*, Classical Philology. *Thesis*, "Utrum Ovidius Epistulas Heroidum XVI–XXI scripserit et quo tempore quaeritur." Instructor in Greek and Latin, Western Reserve University.

William Hall Clawson, A.B. (*Univ. of New Brunswick*) 1900, A.B. (*Harvard Univ.*) 1901, A.M. (*ibid.*) 1902.
Subject, Philology. *Special Field*, English Philology. *Thesis*, "The Robin Hood Ballads." Lecturer in English, University College, Toronto.

Herbert Spencer Davis, PH.B. (*Wesleyan Univ., Conn.*) 1899.
Subject, Biology. *Special Field*, Zoölogy. *Thesis*, "Spermatogenesis in Acrididae and Locustidae." Assistant Professor of Zoölogy, Washington Agricultural College.

Horatio Willis Dresser, A.B. 1894, A.M. 1904.
Subject, Philosophy. *Special Field*, Metaphysics. *Thesis*, "The Element of Irrationality in the Hegelian Dialectic." Assistant in Philosophy at this University.

Louville Eugene Emerson, A.M. 1905.
Subject, Philosophy. *Special Field*, Psychology and Ethics. *Thesis*, "An Investigation in the Simultaneous Stimulation of Adjacent Touch Spots on the Skin." Instructor in Psychology, University of Michigan.

Calvin Olin Esterly, A.B. (*Univ. of California*) 1902, A.M. (*ibid.*) 1904.
Subject, Biology. *Special Field*, Zoölogy. *Thesis*, "The Light-Recipient Organs of the Copepod Eucalanus elongatus." Professor of Biology, Occidental College.

Charles Shattuck Fox, A.B. (*Univ. of Rochester*) 1891, LL.B. (*Albany Law School*) 1893, A.M. (*Harvard Univ.*) 1903.
Subject, Philology. *Special Field*, Germanic Philology. *Thesis*, "The Omission of the Auxiliaries *haben* and *sein* in Subordinate Clauses." Instructor in Modern Languages, Lehigh University.

Howard Levi Gray, A.B. (*Univ. of Rochester*) 1897, A.B. (*Harvard Univ.*) 1898, A.M. (*ibid.*) 1900.
Subject, History. *Special Field*, Economic History. *Thesis*, "A Contribution to the Study of Anglo-Saxon Settlement." Continuing his studies at London, as Edward William Hooper Fellow.

Richard Mott Gummere, A.B. (*Haverford Coll.*) 1902, A.M. (*Harvard Univ.*) 1904.
Subject, Philology. *Special Field*, Classical Philology. *Thesis*, "De Variis Similitudinum Generibus apud Poetas Latinos ante Aetatem Augusteam." Instructor in Latin, Haverford College.

John György, J.U.D. (*Univ. of Kolozsvár*) 1901.
Subject, Philosophy. *Special Field*, Social Ethics. *Thesis*, "Faith and Social Progress: Prospective and Retrospective Social Evolution Conceived as Progressive Faith Manifestation." Instructor in New Testament Exegesis and Sociology, University of Kolozsvár, Hungary.

Charles Phillips Huse, A.B. 1904, A.M. 1905.
Subject, Economics. *Special Field*, Public Finance. *Thesis*, "The Financial History of Boston from 1822 to 1859." Austin Teaching Fellow in Economics at this University.

Herman Brunswick Kipper, S.B. 1904, A.M. 1905.
Subject, Chemistry. *Special Field*, Organic Chemistry. *Thesis*, "Ketone Substitution Derivatives of Orthohydroxyketones, Alkali-Insoluble Phenols." Continuing his studies at this University.

John Edwards LeBosquet, A.B. 1896, S.T.B. (*Andover Theol. Seminary*) 1899, A.M. (*Harvard Univ.*) 1906.
Subject, Philosophy. *Special Field*, Philosophy of Religion. *Thesis*, "True and False in Miracle." Assistant in Philosophy at this University.

Walter Lichtenstein, PH.B. (*New York Univ.*) 1899, A.B. (*Harvard Univ.*) 1900, A.M. (*ibid.*) 1901.
Subject, History. *Special Field*, History of Germany. *Thesis*, "The Turkish Peril and the German Reformation." Assistant in charge of European History in the Library of this University.

Frederick William Charles Lieder, A.B. (*Cornell Univ.*) 1902, A.M. (*ibid.*) 1903.
Subject, Philology. *Special Field*, Germanic Philology. *Thesis*, "Friedrich Spe: Studies on the *Truts Nachtigal*, and on the Relation between the *Güldenes Tugendbuch* and Leibniz's *Théodicée*." Instructor in German at this University.

Dean Putnam Lockwood, A.B. 1903, A.M. 1904.
Subject, Philology. *Special Field*, Classical Philology. *Thesis*, "De Vita Operibusque Rinucci Aretini." Continuing his studies in Italy, as Parker Fellow.

Henry Noble MacCracken, A.B. (*New York Univ.*) 1900, A.M. (*ibid.*) 1904, A.M. (*Harvard Univ.*) 1905.
Subject, Philology. *Special Field*, English Philology. *Thesis*, "Studies in the Life and Writings of John Lydgate, the Monk of Bury." Continuing his studies at Oxford, as John Harvard Fellow.

William Alfred Morris, A.B. (*Leland Stanford Jr. Univ.*) 1901.
Subject, History. *Special Field*, English History. *Thesis*, "The Frankpledge System." Instructor in History, University of Washington.

Edward Mueller, S.B. (*Purdue Univ.*) 1902, A.M. (*Harvard Univ.*) 1905.
Subject, Chemistry. *Special Field*, Inorganic Chemistry. *Thesis*, "The Atomic Weights of Potassium and Chromium." Instructor in Chemistry, Medical School of Washington University.

Albert Granberry Reed, A.B. (*Vanderbilt Univ.*) 1895, A.M. (*Yale Univ.*) 1899.
Subject, Philology. *Special Field*, English Philology. *Thesis*, "Jonson's Influence on Non-Dramatic Poetry of the Seventeenth Century before 1660." Instructor in English, University of Missouri.

Morton Collins Stewart, PH.B. (*Brown Univ.*) 1894, A.M. (*ibid.*) 1896.
Subject, Philology. *Special Field*, Germanic Philology. *Thesis*, "Brockes's Rendering of Thomson's 'Seasons' and the Later German Translations." Instructor in German at this University.

Edgar Thackray, A.B. (*Victoria Univ., England*) 1902, A.B. (Honor Degree) (*ibid.*) 1904, A.M. (*ibid.*) 1905.
Subject, Philosophy. *Special Field*, History of Greek Philosophy. *Thesis*, "A Comparative Study of Sense Perception in Greek Philosophy." Pastor, Fitzwilliam Street Unitarian Church, Huddersfield, Yorkshire, England.

Alexander Mackenzie Thompson, A.M. (*Queen's Univ.*) 1902, A.B. (*Harvard Univ.*) 1903, A.M. (*ibid.*) 1904.
Subject, Philology. *Special Field*, Classical Philology. *Thesis*, "De Ratione quae inter Scholiastam in Statii Thebaïda et Hyginum Mythographum intercedat." Instructor in Greek, University School, Cleveland, O.

Karl Tinsley Waugh, A.B. (*Ohio Wesleyan Univ.*) 1900, A.M. (*ibid.*) 1901, A.M. (*Harvard Univ.*) 1906.
Subject, Philosophy. *Special Field*, Psychology. *Thesis*, "The Rôle of Vision in the Mental Life of the Mouse." Associate in Psychology, University of Chicago.

Karl Young, A.B. (*Univ. of Michigan*) 1901, A.M. (*Harvard Univ.*) 1902.
Subject, Philology. *Special Field*, English Philology. *Thesis*, "The Origin and Development of the Story of Troilus and Criseyde." Continuing his studies at Paris, as Parker Fellow.

There was one Doctor of Science:—

Ernest Linwood Walker, B.A.S. 1896, S.B. 1903.
Subject, Biology. *Special Fields*, Medical Zoölogy and Bacteriology. *Thesis*, "The Parasitic Amoebae of the Intestinal Tract of Man and other Animals." Bacteriologist in charge of the Diagnostic Laboratory of the Massachusetts State Board of Health.

Thirty fellowships were assigned for the year 1906–07, including six John Harvard Fellowships without stipend. There were ten resident and twenty non-resident appointments. A list of the incumbents follows. After the name of each fellow is given the name of his fellowship, the subject that he studied, and his present occupation. The place of study of the non-resident fellows is also indicated.

NON-RESIDENT FELLOWS.

Walter Eugene Clark, Rogers Fellow. Indic Philology. Berlin.
Instructor in Sanskrit, University of Chicago.

George Shannon Forbes, John Harvard Fellow. Chemistry. Leipsic.
Associate in Chemistry, Bryn Mawr College.

James Ford, Robert Treat Paine Fellow. Social Science. Paris, Brussels, Berlin.
Assistant in Social Ethics. Fellow for Social Research on the Sage Foundation, in connection with the School for Social Workers. Fourth-year Graduate student.

Harry Louis Gideon, John Thornton Kirkland Fellow. Music. Paris.
Now residing in Cambridge.

Leroy Albert Howland, Parker Fellow. Mathematics. Munich.
Reappointed. Continuing his studies at Munich.

Alexander Edward Hoyle, Nelson Robinson Jr. Fellow. Architecture. Rome.
Reappointed. Continuing his studies in Europe.

Ellsworth Huntington, Edward William Hooper Fellow. Geography. Milton, Mass.
Instructor in Geography, Yale University.

Burritt Samuel Lacy, Parker Fellow. Chemistry. Carlsruhe.
Continuing his studies at Carlsruhe.

John Hancock McClellan, Parker Fellow. Zoölogy. Berlin.
Associate in Zoölogy, University of Illinois.

John Tucker Murray, Edward William Hooper Fellow. English. London.
Continuing his studies in Europe.

Clarence Perkins, Ozias Goodwin Memorial Fellow. History and Government. London, Oxford, Paris.
Instructor in History, University of Missouri.

Walter James Shepard, Rogers Fellow. History. London, Berlin.
Instructor in History, University of Wisconsin.

Kendall Kerfoot Smith, Charles Eliot Norton Fellow. Classical Archaeology. Athens.
Continuing his studies at Athens, as Fellow of the American School of Classical Studies.

Elijah Swift, John Harvard Fellow. Mathematics. Göttingen.
Preceptor in Mathematics, Princeton University.

Charles Hansen Toll, John Harvard Fellow. Philosophy. Travelled around the world.
Reappointed. Continuing his studies in Germany.

Abbott Payson Usher, Francis Parkman Fellow. History. Paris.
Assistant in Economics. Fourth-year Graduate student.

Harry Edward Warren, Julia Amory Appleton Fellow. Architecture. Rome.
Continuing his studies in Europe.

Hermann Julius Weber, John Harvard Fellow. Germanic Philology. Berlin.
Instructor in German at this University.

Arthur Fisher Whittem, John Harvard Fellow. Romance Languages. Paris.
Instructor in Romance Languages at this University.

Casimir Douglass Zdanowicz, Harris Fellow. Romance Languages. Paris.
Instructor in Romance Languages, University of Wisconsin.

RESIDENT FELLOWS.

Joseph Warren Beach, Edward Austin Fellow. English.
Assistant Professor of English, University of Minnesota.

Percy Williams Bridgman, John Tyndall Scholar. Physics.
Reappointed. Fourth-year Graduate student.

Horace Meyer Kallen, James Walker Fellow. Philosophy.
Continuing his studies at Oxford, as Henry Bromfield Rogers Memorial Fellow.

Walter Wallace McLaren, Henry Lee Memorial Fellow. Economics.
Assistant in Economics. Third-year Graduate student.

Charles Edward Persons, Henry Bromfield Rogers Memorial Fellow. Economics.
Third-year Graduate student.

William Oscar Scroggs, Edward Austin Fellow. History and Political Science.
Engaged in editorial work on the Encyclopaedia Britannica.

Eugene Lloyd Sheldon, South End House Fellow. Sociology.
Engaged in newspaper work, New York City.

Ralph Edward Sheldon, Edward Austin Fellow. Zoölogy.
Graduate student, University of Chicago.

Alexander Mackenzie Thompson, John Harvard Fellow. Classics.
Instructor in Greek, University School, Cleveland, O.

Karl Young, Edward Austin Fellow. English.
Continuing his studies at Paris, as Parker Fellow.

NEW SCHOLARSHIPS AND FELLOWSHIPS.

An examination of the distribution of graduate scholarships and fellowships for several years past will show that very few, hardly more than one or two a year, have been awarded to men who are just taking a bachelor's degree elsewhere than at Harvard, and who desire at once to enter upon graduate study. It is therefore evident that our beneficiary funds are of very small direct effect in aiding such graduates to come to the School. The reason of this is not to be found in the lack of such candidates or in their inferior quality, but in the fact that applications from men of more maturity, who have not infrequently spent a year in the School doing excellent work without aid from scholarship funds, must be given precedence in the distribution of scholarships not limited to particular uses. It may be pointed out in this connection that several years ago a number of graduates of other colleges registered themselves as candidates for the Harvard degree of A.B. in Harvard College, where they, as newcomers, were often given aid from the Price Greenleaf Fund. It is now the practice of the College Committee on Admission to advise such men not to enter Harvard College; and the Committee on Undergraduate Scholarships has decided to reserve the Price Greenleaf aid for less mature applicants. This policy deprives the class of men referred to of the aid that they formerly received and substitutes no other aid. These facts were presented to the Faculty in May, and a recommendation was voted that the Corporation be requested "to establish twenty-five University Scholarships in the Graduate School of Arts and Sciences, to be given by preference to Seniors of high standing in Harvard and in other colleges, regard being had in the assignment of these scholarships to the geographical distribution of the beneficiaries." These twenty-five scholarships were instituted by the Corporation on May 27, and six of them were filled. It is believed that they will prove very useful in coming years.

Three new fellowships were established in the School near the close of the year. The Willard Scholarship (ranked as a fellowship) established, with a stipend of $450, from the bequest of John Bartlett, Esq., late of Cambridge, is "to be assigned each year to a person who has attained an established position as a teacher in a college or secondary school, or as a superintendent of schools, and intends to return to educational service after his residence in the University, preference to be given to teachers of literature and to graduates of Harvard College." The South End House Fellowship in Social Education, with an income for 1907–08 of $600 guaranteed by the South End House Association, is to be administered by the Division of Education in consultation with the Secretary of the Social Education Club and with the Head of the South End House, where the incumbent shall be in residence. Finally an anonymous friend of the Peabody Museum of American Archaeology and Ethnology has given the sum of $600 to maintain a fellowship in the Graduate School of Arts and Sciences for the year 1907–08, the incumbent to be required to pursue lines of research in Central American Archaeology and Ethnology approved by the Division of Anthropology.

ASSIGNMENT OF SCHOLARSHIPS AND FELLOWSHIPS.

A communication was received in December from the Association of American Universities, suggesting that the several Universities constituting that Association should agree upon a uniform practice in the assignment of fellowships and scholarships for Graduate students. It was not intended under the proposed uniform practice to prevent a candidate from applying to more than one university, or to interfere in any way with his free choice among several scholarships that might be offered him by different universities, but to do away with the practice that has been felt objectionable in some quarters whereby a candidate who has been offered a scholarship of a certain value in one university tries at a later date to secure a more valuable scholarship in another university. After the proposed plan had been considered by the Committee on Fellowships and other Aids for Graduates, it was recommended to the Faculty that the latest date for receiving applications for Graduate scholarships and fellowships should be made uniform in all the universities concerned; that the date of appointment should likewise be as nearly uniform as possible, about April 1; that lists of candidates appointed to scholarships in each university should then be sent to all the other universities in the Association; and that later, revised lists, containing the names of appointees who have accepted their appointments, should be similarly distributed.

In the practical application of this plan, it was evidently desirable to reduce to the shortest period possible the interval between the last date of receiving applications and the date of action by the Faculty. For some years past this interval has been from forty to fifty days; prior to 1899 it was two months or more. Last year it was reduced to nineteen days, the saving of time being accomplished chiefly by notifying the several Divisions of the Faculty beforehand of the date on which the application papers would be sent them for consideration, so that the Division meetings could be held immediately after the receipt of the papers. In this way only five days were found necessary for action on the application papers by the Division committees; the following week proved sufficient for the action of the Committee on Fellowships and other Aids for Graduates in assigning the available fellowships and scholarships to the candidates recommended by the Division committees; and in the next week the assignment proposed by the Committee was adopted by the Faculty. The proposed plan was thus shown to be practicable as far as Harvard was concerned.

REQUIREMENTS FOR DEGREES.

The requirements for the degree of A.M., for a thoroughly qualified candidate, and always subject to the minimum requirement of at least one full year of residence, are as a rule four advanced courses of study suitably related and completed with distinction. This practically means that if a candidate receives a grade of *C* or lower in any course or half-course, he fails to be recommended for a degree. The usual practice of such candidates has been to present themselves again for further study, and thus to complete their record.

It has, however, recently happened that a number of unsuccessful candidates have petitioned to be allowed to make up their deficiency by studying *in absentia* and presenting themselves here only for reëxamination in the course in which the deficiency has occurred. After careful consideration of a number of these cases the Administrative Board *voted:* —

> "That a student who has failed in a course for the A.M. degree shall not ordinarily be allowed to make up his deficiency by examination or by the substitution of a thesis for an examination."

Candidates for the degree of Ph.D. are required to devote at least two years to advanced work approved by the appropriate Division of the Faculty. Many candidates for the doctorate are, during part of their candidacy, appointed as Austin Teaching Fellows, and as such they are allowed to devote not more than half their time to advanced study or research. It is true that some of these men attain marks in this half or less of their time in as many as four advanced courses of study with high credit; but inasmuch as the work of a candidate for the doctorate is to be measured in time and not in courses, it follows that, however many courses he may carry on, an Austin Teaching Fellow can ordinarily be credited with only half a year towards his doctorate for each year in which he holds his fellowship. In view of this the Administrative Board *voted:* —

> "That no Austin Teaching Fellow or assistant shall ordinarily be given credit for full residence.
>
> "That assistants who give not more than six hours a week to assisting be ordinarily allowed to count the whole year toward the time requirement for the Ph.D."

The Board considered the subject with particular reference to the degree of Doctor of Philosophy; but it is obvious that the same principles hold good as respects the degrees of Master of Arts, Master of Science, and Doctor of Science, since in the case of each the requirement of residence and study is made in terms of full years and not of courses.

An advantageous rearrangement of the Catalogue statements regarding the requirements for degrees and certain other matters was made last year.

THE ENTITY OF THE SCHOOL.

The Graduate School of Arts and Sciences is peculiar among our graduate schools in that its students are scattered through many Departments of the Faculty. They cannot be housed together in the pursuit of their studies, as is so conveniently the case with students in the Law, Medical, and Divinity Schools; they have at present no natural reason for coming together, and they are all so busy that no artificial reason suffices to assemble them. As a result our students are largely unacquainted with each other, outside of the several departments; they never see themselves in a body; they are lost in the undergraduate crowd; they gain no impression of the personal and numerical strength of the School, such as is made daily on students in the Law and Medical Schools by the visible concourse of their own members. It is of course recognized that the greatest strength of the School lies in the opportunities that it affords for advanced study in close association with the teachers of our various departments, and that the development of these departments as such is thoroughly cared for by the departmental committees. But it ought to be recognized more than is the case to-day that material advantage would come to the School if its officers and students had more frequent occasion to be impressed with the School as an entity; hence every influence which may contribute to impressing the entity of the School upon the University public should be cultivated. Some of these influences may be here specified.

On the part of the students themselves there has been for some years a Graduate Club, which has held meetings about once a month. The Club certainly has performed a useful purpose, but even since its meetings have been held in Brooks House or in the common room of Conant Hall, instead of in the very limited space offered by the room of a member, it has not been successful in enlisting a majority of the students in the School as Club members; and it has not yet led to so natural a result as the formation of a permanent association of the members of the School. Hence, while the School undoubtedly possesses many individual elements of strength, it does not yet possess the strength which comes of union.

The reservation of Conant Hall for Graduate Students has been eminently successful. Not only has the Hall been filled with Graduate Students for the past year, but before the end of March all the rooms but three were bespoken for the present year, and it was necessary to disappoint many late applicants. The attractive common room has been much enjoyed, not only by the occupants of the

Hall, but also by various clubs and conferences of which the greater number of members were Graduates. It would thus appear that a natural segregation of Graduate Students would take place, if special dormitories were assigned to them; especially if the rooms were simply furnished so that they could be rented at moderate prices, ready for immediate occupation. If a large dormitory of this kind were built near Conant Hall, it would establish that district of Cambridge as the centre of Graduate residence. Of even greater attractiveness would be a Graduate refectory, situated in the same district or between it and the College Yard, where some three hundred men could conveniently have their meals together. This would bring a majority of the School into a natural and visible relation three times a day; if a reading room could be added, so much the better. For the present the establishment of such a refectory might draw away students who could be ill spared from Memorial and Randall Halls, but with the increase in numbers that difficulty will disappear.

In order to give fuller consideration to these and other questions of general import, it was requested that a committee to visit the School should be appointed by the Overseers. This was done, Professor W. W. Goodwin being named as chairman. A meeting of the Committee, represented by four of its members, and of a number of professors interested in graduate teaching was held in the office of the School on April 5, and Conant Hall was visited.

The annual reception for the students of the School for the current year was held on Thursday evening, October 3, in the Faculty Room. Addresses were made by Professor George H. Palmer, on "Specialization," and by Professor Sabine. Professor Paul Clemen, Visiting Professor of German Art, Professor Otto Pfleiderer, of the University of Berlin, and President Eliot also spoke.

W. M. DAVIS, *Acting Dean.*

THE DIVINITY SCHOOL.

To the President of the University: —

Sir, — As Dean of the Divinity School I have the honor to present the following report for the year 1906–07.

Professor Peabody's resignation as Dean of the School was deeply regretted by both Faculty and students. During his years of service the School passed through exceptional changes in Faculty and curriculum, and, in the readjustments which were required by these changes, Professor Peabody's wisdom and tact were of utmost value. Moreover, his eminence as writer and speaker, and the esteem in which he is held by members of all denominations, have done much to recommend the School to the larger constituency which its non-denominational character naturally seeks. It is fortunate that, notwithstanding the increasing demands of his work in Sociology, Professor Peabody still retains his connection with the School, to aid the Faculty by his counsel and the students by his wise and inspiring instruction.

The instruction offered by the School during the past year was materially diminished by the absence during the entire year of Professors Emerton and Lyon, and during the second half-year of Professor E. C. Moore. Professor Emerton spent his Sabbatic year abroad, and Professor Lyon was Director of the American School in Palestine. Professor E. C. Moore visited China as a representative of the American Board of Commissioners for Foreign Missions. That a member of our Faculty should have been selected for so important a mission by the American Board, and should also have given theological instruction in the Yale Divinity School, as well as at Harvard, during the first half-year, is a striking indication both of the clearer recognition of the character of our School, and also of changing theological and ecclesiastical conditions in New England.

At the beginning of the academic year it was hoped that this report would chronicle an even more noteworthy sign of change in the same direction by recording the successful issue of negotiations then pending for the removal of Andover Theological Seminary to Cambridge. Although these negotiations are now at a standstill, it is understood that the project has not been abandoned by the Trustees of Andover, and there is still reason to hope for the enlargement of theological instruction and the fellowship between teachers and students of both Schools which would result from such neighborly coöperation.

During the discussion aroused by this proposition for removal, it appeared that opinions widely prevail to the effect that our School trains theological scholars rather than parish ministers, that, indeed, many of its graduates never enter the ministry at all, and that, notwithstanding its non-denominational character, nearly all of its students who do enter the ministry are called to Unitarian pulpits. An examination made by the Secretary of the Faculty into the professional history of the students of the School during the past ten years, shows that of the 49 students who have received our degree, 36 are now in charge of parishes, 3 are ordained ministers temporarily without settlement, 4 are teachers in theological positions, 2 are engaged in philanthropic work, 2 are still students, 1 is unaccounted for, and only 1 is in an occupation unrelated to the work of the ministry. Of the 180 who have been students at the School but have not taken our degree, either because they have received the degree of A.M. or Ph.D., or have done less than full work, 114 are now in charge of parishes, 6 are teachers in theological, and 26 in general educational positions, 7 are ministers at present without settlement, 7 are still students, 3 have entered philanthropic work, 4 are unaccounted for, and 13 have entered unrelated occupations. Of the students who have received the degree of the School and entered the active ministry, 65% were called to Unitarian pulpits and 35% to churches of other denominations. Of those connected with the School but not receiving our degree, 38% were called to Unitarian churches and 62% to churches of other denominations. This investigation shows, therefore, that students of the School do become parish ministers, and that their distribution among twelve different denominations is what might be expected in the case of a non-denominational school.

In response to an invitation from the Trustee of the Lowell Institute, our Faculty arranged a course of lectures upon Current Problems in Theology, which were delivered in King's Chapel. This may have suggested to the Proprietors of King's Chapel the arrangement which has since been made by which our Faculty has been given the responsibility of approving the selection of new members of the Board of Trustees, in whose hands the property of the Chapel has been placed, and in certain contingencies of removing the Trustees and appointing others in their stead. In consequence of this arrangement, members of the Faculty have received an invitation, which has been gladly accepted, to coöperate with the minister of King's Chapel in the Sunday afternoon preaching services of the present winter.

The 40 students enrolled in the year 1906–07 were distributed as follows: —

Resident Graduates	13
Senior Class	8
Middle Class	6
Junior Class	9
Special Students	4
Total	40

Twenty-nine colleges were represented as follows: —

Aberystwyth College, Wales	1	University of Michigan	1
Amherst College	1	Middlebury College	1
Brown University	2	University of North Carolina	1
University of Buffalo	1	Ohio Wesleyan University	1
University of California	2	Oxford University, England	1
Central College	1	University of Rochester	1
College of Charleston	1	University of South California	1
Colgate University	1	Tufts College	1
Cornell University	1	Union College, Ky.	1
Dartmouth College	3	Vanderbilt University	1
De Pauw University	1	Williams College	1
Dickinson College	1	University of Wooster	1
Drake University	1	Yale University	1
Harvard University	13		45
Kansas Wesleyan University	1	Counted more than once	8
Kolozsvár University, Hungary	1		37

Thirteen theological seminaries were represented as follows: —

Andover Theological Seminary	2
Bangor Theological Seminary	2
Berkeley Bible Seminary	1
Boston University	2
Concordia Theological Seminary	1
Harvard University	3
Theological School of Kolozsvár, Hungary	1
Manchester College, England	1
Nashotah House	1
Newton Theological Institution	2
Pacific Theological Seminary	1
Rochester Theological Seminary	1
Southern Baptist Theological Seminary	1
	19
Counted more than once	1
	18

The interchange of instruction between the Faculty of the School and the Faculty of Arts and Sciences indicates the extent of the contribution made by the Divinity School to the general work of the

University. This interchange between the two Faculties in 1906–07 was as follows: —

Divinity students taking courses offered by the Faculty of Arts and Sciences, 1906–07: —

Semitic	3	elections.
English	1	"
German	1	"
Economics	14	"
Philosophy	25	"
Social Ethics	11	"
Music	1	"
	56	

Non-Divinity students electing courses offered by the Divinity School, 1906–07: —

Old Testament	19	elections.
New Testament	11	"
Church History	41	"
History of Religions	53	"
Theology	8	"
Ethics	170	"
	302	"

Seven members of the School received the degree of S.T.B., five the degree of A.M., and two the degree of Ph.D.

The degree of A.M. was also conferred upon one person for work done in the Divinity School in 1905–06.

The report of last year's Summer School is distinctly encouraging. In accordance with the arrangement entered upon two years ago, the lectures were devoted to the problems of Social Ethics. The attendance was larger than at any previous session of the School, except the first, and the interest of the students was well maintained. That 103 persons, the great majority of whom were in charge of parishes, should have been willing to devote vacation time, at considerable expense, to lectures of academic character shows that the ideal of a learned ministry is still persuasive.

The nine sessions of the School have had the following record of attendance: —

	Men.	Women.	Total.
1899	96	9	105
1900	52	2	54
1901	84	5	89
1902	74	4	78
1903	54	4	58
1904	46	1	47
1905	54	7	61
1906	59	9	68
1907	92	11	103
	611	52	663

The distribution by denomination, in the case of ministers attending in the nine years, was as follows: —

	Orthodox Congregational.	Unitarian Congregational.	Episcopalian.	Universalist.	Baptist.	Presbyterian.	Disciples.	Methodist.	Free Baptist.	Lutheran.	Christian Connection.	German Reformed.	Moravian.	Evangelical Association.	Dutch Reformed.	Jewish.
1899	27	17	16	14	5	3	..	..	..	..	..	..	..	..	..	..
1900	17	6	3	14	6	..	3	3	..	..	..	..	..	..	..	..
1901	28	12	11	14	5	2	..	10	1	1	..	..	..	..	..	..
1902	28	7	15	3	5	1	1	8	1	1	..	..	..	..	..	..
1903	21	4	10	5	..	5	3	1	1	..	1	1	1	..	..	..
1904	13	6	11	1	7	1	..	3	1	..	1	..	..	1	..	..
1905	7	4	14	3	5	1	5	9	..	..	1	3	..	..	1	..
1906	8	7	16	2	3	3	2	5	..	1	..	5	..	..	..	1
1907	13	12	17	9	5	5	3	15	..	3	..	2	..	..	..	..
	162	75	113	65	41	21	17	54	4	6	3	11	1	1	1	1

The following is a list of the Courses of Instruction offered in the School in the year 1906–07. With each course is a statement of the number of students electing it from the Divinity School, the Graduate School of Arts and Sciences, Harvard College, the Lawrence Scientific School, the Medical School, and Radcliffe College. A list of the lectures of the Summer School and a list of the lectures delivered by the Faculty in the Lowell Institute course in King's Chapel are appended to the list of regular courses.

COURSES OF INSTRUCTION.

INTRODUCTION TO THE STUDY OF THEOLOGY.

Professor G. F. Moore. — Eight lectures. *First half-year.* (Not counted for a degree.) 2 Div.

OLD TESTAMENT.

1. Dr. Haynes. — Hebrew. Morphology. Explanation of parts of Genesis and of the Book of Psalms. 3 Col.

2. Professor Toy. — Hebrew (second course). — Syntax. Interpretation of parts of the Prophets and the Poetical Books. Text-criticism. 1 Div., 1 Col.

4. Professor G. F. Moore. — History of Israel, political and social, till the capture of Jerusalem by the Romans. 6 Div., 9 Col.

5. Professor G. F. Moore. — History of Jewish Literature from the earliest times to 200 A.D. 5 Div., 3 Col.

6. Professor **Toy**. — History of the Hebrew Religion, with comparison of other Semitic religions. 7 Div., 1 Gr., 1 Col.

7. Dr. **Haynes**. — Assyrian. 1 Col.

20. Research courses. The instructors will arrange and supervise for any properly prepared student a line of special study on such topic as may be agreed on. 1 Div.

NEW TESTAMENT.

2. Professor **Ropes**. — Introduction to the Study of the New Testament. *First half-year:* The origin and early history of the New Testament writings. *Second half-year:* The teaching of Jesus Christ, and the theological and ethical ideas of the New Testament writers.
As full course, 6 Div., 2 Gr., 6 Col. As half-course, 2 Div.

6 ^{1}*hf*. Professor **Ropes**. — The Gospel and Epistles of John. Selected portions. *Half-course.* 2 Div.

7 ^{2}*hf*. Professor **Ropes**. — The Apostolic Age. Study of the Acts of the Apostles. *Half-course.* 4 Div., 1 Rad.

8. Professor **Ropes**. — The Epistles of Paul. Selected portions.
2 Div., 2 Rad.

15 ^{1}*hf*. Professor **Fenn**. — The Theological Method of Jesus and Paul. *Half-course.* 3 Div.

CHURCH HISTORY.

4 ^{1}*hf*. Professor E. C. **Moore**. — The Church since the Reformation. *Half-course.* 4 Div., 41 Col.

10 ^{1}*hf*. Professor **Platner** (Andover Theological Seminary). — Christian Institutions, historically and comparatively considered. 7 Div.

HISTORY OF RELIGIONS.

1 ^{1}*hf*. Professor G. F. **Moore**. — Introduction to the Study of Religions. *Half-course.* 9 Div., 3 Gr., 9 Col., 1 Sc.

2. Professor G. F. **Moore**. — History of Religions in Outline.
As full course, 4 Div., 3 Gr., 36 Col., 1 Med. As half-course, 3 Div.

THEOLOGY.

1 ^{1}*hf*. Professor **Fenn**. — Theism. *Half-course.* 9 Div., 1 Gr., 1 Col.

2 ^{2}*hf*. Professor **Fenn**. — Outlines of Systematic Theology. *Half-course.*
12 Div.

3 ^{1}*hf*. Professor **Fenn**. — New England Theology. *Half-course.* 3 Div.

5 ^{2}*hf*. Professor **Fenn**. — The History and Philosophy of Christian Mysticism. *Half-course.* 8 Div.

6 ^{1}*hf*. Professor E. C. **Moore**. — The History of Christian Thought since Kant, including a discussion of the present state and tendencies of theological thought. *Half-course.* 8 Div., 2 Gr., 4 Col.

ETHICS.

1. Professor **Peabody**, assisted by Dr. **Rogers**. — Social Ethics. — The Problems of Poor Relief, the Family, Temperance, and various phases of the Labor Question, in the light of ethical theory. — Lectures, special researches, and prescribed reading.
As full course, 8 Div., 6 Gr., 157 Col. As half-course, 4 Div.

20*a*. Professor **Peabody**. — Seminary of Social Ethics. — Subject for the year: Christian Ethics and Modern Life.
As full course, 16 Div., 3 Gr., 1 Rad. As half-course, 1 Div.

20*b*. Professor **Peabody**. — The instructor directs special researches of competent students in the Ethics of the Social Questions.
2 Div., 1 Gr., 1 Col., 1 Rad.

HOMILETICS AND PASTORAL CARE.

1 [1]*hf*. Professor **Peabody**. — Preaching and the Conduct of Worship. *Half-course.* 9 Div.

2. Professors **Peabody**, **E. C. Moore**, and **Fenn**. — Preaching. Each student prepares eight sermons during the year, of which some are preached before the class and criticized by students and instructor [in Appleton Chapel], and the rest are criticized by the instructor privately. Students in this course should already have taken Homiletics 1 or its equivalent. The course may be taken a second year with the permission of the instructors and may be entered at the beginning of the second half-year.
As full course, 12 Div. As half-course, 4 Div.

ELOCUTION.

1. Mr. **Willard**. — Voice Training and the Elements of Form in Speaking. Preparatory to Course 2. (Not counted for a degree.) 5 Div.

2 *hf*. Asst. Professor **Winter** and Mr. **Willard**. — Sermon Delivery, Scripture Reading, Oral Discussion. *Half-course.* 10 Div.

SUMMER SCHOOL OF THEOLOGY.

President C. W. **Eliot**. — One lecture: Introductory address.

Professor F. G. **Peabody**. — Six lectures: The Approach to the Social Question.

Professor L. B. **Paton**. — Three lectures: The Sociological Uses of the Old Testament.

Professor J. H. **Ropes**. — Three lectures: The Application of New Testament Teaching to Sociology.

Professor **Shailer Mathews**. — Eight lectures: The Social Content of Christian Doctrine.

Professor F. W. **Taussig**. — Three lectures: Some Fundamental Questions as to Private Property and Socialism.

Professor C. J. **Bullock**. — Three lectures: The Ministry and the Labor Question.

Professor **Josiah Royce**. — Four lectures: Loyalty as an Ethical Principle.

Professor J. B. **Ames**. — Two lectures: Marriage and Divorce from the Lawyer's Point of View.

Professor **Jeremiah Smith**. —Two lectures: Legal Aspects of the Labor Question.

Mr. R. A. **Woods**. — Four lectures: Women and Children in Industrial Life.

Dr. J. R. **Brackett**. — Four lectures: Leading Principles of Scientific Charity.

Dr. D. C. **Rogers**. — Two lectures: Problems in Criminology.

KING'S CHAPEL LECTURES.

Professor F. G. **Peabody**. — Two lectures: The Study of Theology and the Preaching of Religion.

Professor G. F. **Moore**. — Three lectures: Foreign Influences on the Religion of Israel.

Professor C. H. **Toy**. — Two lectures: The Present State of Old Testament Criticism.

Professor E. C. **Moore**. — Two lectures: The Absoluteness of Christianity and the History of Religion.

Professor W. W. **Fenn**. — Two lectures: The Authority Concept in Christianity.

Professor J. H. **Ropes**. — Two lectures: The Historical Criticism of the Gospels.

The Librarian of the School reports as follows on the condition of the Library for the year ending July 31, 1907. There were added to the Library 344 volumes and 10 pamphlets by purchase, 229 volumes and 159 pamphlets by gift. August 1, 1907, there were in the Library 36,360 volumes and 9,505 pamphlets. During the year 1,141 titles were catalogued in the author catalogue and 381 titles in the subject catalogue. There were borrowed from the stack for home use 1,155 volumes, from the stack for hall use 557 volumes, from the reserved books for overnight use 486 volumes.

It is a pleasure to record the placing upon the walls of our Chapel of tablets in memory of Henry Ware, Jr., and of Theodore Parker. It is happily significant of the spirit of the School that it should thus simultaneously honor two men who, in the second quarter of the last century, represented contrasted tendencies in the religious thought of New England. These tablets, with the others which dignify and beautify our Chapel, are among the noblest educative agencies of the School.

W. W. FENN, *Dean*.

Departments of Otology and Laryngology, and two rooms here will be assigned to the course on surgical bandaging. Two large tanks have been built in the animal room.

Building C. — In Building C, the animal rooms and cabins have been asphalted to make them water tight. In the chemical wing a distilling apparatus has been installed, and private laboratories have been fitted up for Professors Folin and Christian and for the assistants in the Department of Theory and Practice.

Building D. — In Building D, six unfinished rooms have been equipped as research laboratories.

Building E. — In Building E, a library has been fitted up for the Surgical Department, and it is proposed to carry a staircase from the top floor to the roof. The floors of the animal rooms in this building have been asphalted.

In addition to these details a great deal of carpentering and engineering work has been done in order to fit up the private rooms and general laboratories in the various buildings, as they were only partially equipped when the buildings were first occupied.

An automobile and carriage shelter is in process of construction behind Building D, and the roadway has been continued behind Building B to connect with Van Dyke Street. The bank behind this building has been graded and planted with shrubs. Shrubs also have been planted at the corners of the wings of each building and at the corner of Van Dyke Street and Huntington Avenue. Van Dyke Street in front of Building A has been widened from twelve to sixteen feet.

Libraries. — During the past year the libraries of the various departments of the School have been placed under the general direction of a Committee on Library. This has promoted economy in the purchase of periodicals and books, and uniformity in administration. Librarians have been appointed for the buildings in which the library room is used in common. In addition to their routine library work the librarians also act as secretaries to the heads of departments. Two of the libraries have been named, — one, the "Anatomical Library," and the other, the "Bowditch Library."

The total number of books, bound periodicals, and society publications was, July 31, 1907, 12,788; and of pamphlets, 23,820.

Anatomy. — Professor Dwight has devoted much time to the arrangement in the Museum of the specimens of general osteology and to those of variations of bones.

During the past year much use has been made of the X-ray in the study of variations. Many hands and feet were X-rayed, and subsequently carefully examined to investigate the relations of the skiagraph to actual conditions. Two bodies with persistent stylo-hyoid bars, which had become more or less ossified (one nearly completely), were recognized and X-rayed before dissection was finished. It is thought that this has not been done before.

Dr. John Warren, in the intervals of teaching and executive duties, has added to his series of models showing the development of the paraphysis and of the pineal region. He has completed the models of *lacerta murilis* and of *chrysemis marginata.*

The following publications have been issued: —

The description of the skeleton, including the joints, and that of the gastro-pulmonary system and of the accessory organs of nutrition. By Professor **Thomas Dwight**. *Human Anatomy*, J. B. Lippincott Co.

Referat über die anatomische Literatur Amerikas für die Jahre 1902–3–4. By Dr. **John Warren**. *Ergebnisse der Anatomie und Entwickelungsgeschichte*, 1905, Bd. XV, 1906.

The examination and the surgery of the upper end of the oesophagus. By Dr. H. P. **Mosher**. *Publications of the Massachusetts General Hospital*, Vol. I, No. 3, June, 1907.

The following papers represent work done under the auspices of the Department of Anatomy: —

The cause of so-called habitual lateral curvature of the spine. By Dr. **Max Böhm**. *Boston Medical and Surgical Journal*, Vol. 155, No. 21, November 22, 1906.

The so-called "Ochsner Muscle" of the duodenum. By Dr. **Walter M. Boothby**. *Boston Medical and Surgical Journal*, Vol. 157, No. 3, July 18, 1907, pp. 80–81.

Comparative Anatomy. — Work in Comparative Anatomy proper has been initiated as a consequence of the appointment of Dr. Leonard W. Williams as Instructor in Comparative Anatomy, dating from the mid-year. A plan for a collection of comparative anatomical preparations has been formulated. For the embryological collection twenty-two types of vertebrates have been selected. It is proposed to make a series of preparations illustrating the adult anatomy of these twenty-two types. Upon this special work Dr. Williams has been steadily engaged, and a satisfactory beginning has already been accomplished. The specimens will be placed in cabinets in the hallway adjoining the rooms used for the elementary work, so that they can be readily examined by the students on their way to and from the laboratory. Much care has been used in drawing up the scheme for these new collections and we are specially indebted to Professor C. F. W. McClure for valuable advice in regard to the best methods. The work has been so arranged that the preparations which are now making will be chiefly such as will be helpful in connection with the instruction for the first-year medical students. It is expected that the collection will steadily grow and become with each year of greater value, not only to this department, but to all the other laboratories in the School.

A most important advantage is the establishment of the anatomical library, for the common use of the Departments of Anatomy and Comparative Anatomy. The books belonging to the School and pertaining to these two departments have been brought together. A considerable number of journals, text-books, scientific memoirs, and a collection of some eight thousand pamphlets have been deposited in the library by Professor Minot. Thirty-nine journals are now subscribed for by the School and placed regularly in this library. The advantage for both the students and instructors of the new library can hardly be overestimated.

Sixty-nine new series have been added to the embryological collection during the year. There has also been received an exceptionally fine set of series of sections of Axoloth eggs, specially prepared for the permanent collection by Mr. J. W. Jenkinson of Oxford, England. They illustrate the maturation, impregnation, and early segmentation stages, and strengthen the collection where it is weakest.

Dr. R. J. Terry, Professor of Anatomy at Washington University, St. Louis, on leave of absence for a year, took a Teaching Fellowship. His work both in teaching and in research proved extremely valuable. He contributed many suggestions for the improvement of the instruction, and practically completed three original investigations. The first and most extended was on the development of the pineal region of the brain in teleosts; the second, on the neuroglia in fishes; the third, on the embryonic skull of the cat, based on a fine model prepared according to Born's wax plate method under Dr. Terry's direction by three first-year students, G. D. Cutler, I. Gerber, and R. D. Leonard.

The following publications have been issued: —

The segmental flexures of the notochord. By Professor C. S. MINOT. *Anatomical Record*, Vol. I, pp. 42–50.

The problem of age, growth, and death. Based on lectures before the Lowell Institute, March, 1907. By Professor C. S. MINOT. Published in *Popular Science Monthly*.

A neuroglia syncytium in Batrachus (Opsanus tau). By Professor R. J. TERRY. *Anat. Anzeiger*, Vol. XXXI, pp. 27–30.

The stomach of the lobster and the food of larval lobsters. By Dr. L. W. Williams. *Report of the Commissioners of Inland Fisheries of Rhode Island*, 1907, pp. 153–180, 9 pls.

A list of Rhode Island Copepoda, Phyllopoda, and Ostracoda, with new species of Copepoda. By Dr. L. W. Williams. *Report of the Commissioners of Inland Fisheries of Rhode Island*, 1907, pp. 69–79, 3 pls.

The structure of cilia, especially in Gastropod Molluscs. By Dr. L. W. Williams. *American Naturalist*, Vol. XLI, 1907, pp. 545–551, 2 figs.

The significance of the grasping antennae of Harpacticord Copepods. By Dr. L. W. Williams. *Science*, Vol. XXV, 1907, pp. 225–226.

Physiology. — During the past year several changes were made in the teaching of Physiology. The laboratory experiments were rearranged in such order that the student learns first of what activity an organ or tissue is capable, next how certain factors condition or modify that activity, and finally what may be the effect of the activity. Where possible, experiments combining physiological training and the use of instruments valuable for clinical investigation were introduced. The course was also modified so as to give students extra time for reading, for the repetition of experiments not properly performed, and for special work. In the rearrangement of the instruction the Department of Biological Chemistry was consulted, and, so far as possible, the courses in Physiology and in Biological Chemistry were coördinated.

Numerous investigations have been carried on in the laboratory during the year, and the following have been completed by members of the department: —

The motor activities of the stomach and small intestine after splanchnic and vagus section. By Professor W. B. Cannon. *American Journal of Physiology*, 1906, Vol. XVII, pp. 429–442.

Oesophageal peristalsis after bilateral vagotomy. By Professor W. B. Cannon. *American Journal of Physiology*, 1907, Vol. XIX, pp. 436–444.

Physiologic observations on experimentally produced ileus. By Professor W. B. Cannon and Dr. F. T. Murphy. *Journal of the American Medical Association*, 1907, Vol. XLIX, pp. 840–843.

A research on the acid control of the pylorus. By Professor W. B. Cannon. Is ready for publication.

Gastric peristalsis in rabbits under normal and some experimental conditions. By Dr. John Auer. *American Journal of Physiology*, 1907, Vol. XVIII, pp. 347–361.

Two papers on a quantitative study of faradic stimulation. By Dr. E. G. Martin. Are ready for publication.

Comparative Physiology. — Informal lectures and demonstrations given weekly by Professor Porter during November, December, and January, were doubled by the request of students. Numerous investigations have been carried on and material collected for future study.

A number of improvements have been made in the design of the kymograph and certain other apparatus employed in teaching and research.

Dr. Frederick Haven Pratt, with Professor Porter, has developed a method for the study of the vasomotor relations of peripheral areas. With this method, it has been discovered that any considerable change in the general blood pressure produces a compensatory change in the diameter of the peripheral vessels.

The following investigations have been published: —

The effect of injuries of the brain on the vasomotor centre. By W. T. PORTER and T. A. STOREY. *The American Journal of Physiology*, 1907, Vol. XVIII, pp. 181–199.

The effect of uniform afferent impulses upon the blood pressure at different levels. By W. T. PORTER. *The American Journal of Physiology*, 1907, Vol. XX. (This paper was read before the Seventh International Congress of Physiologists, held at Heidelberg, August 13 to 16.)

Relation of afferent impulses to vasomotor fatigue. By H. K. MARKS and J. B. SWIFT. *The American Journal of Physiology*, 1907, Vol. XX.

Further data regarding the condition of the vasomotor neurons in "shock." By W. T. PORTER and W. C. QUIMBY. *The American Journal of Physiology*, 1907, Vol. XX.

Vasomotor relations. By W. T. PORTER. A lecture delivered before the Harvey Society in New York and published by them in their annual volume.

Biological Chemistry. — During the past year the Department of Biological Chemistry has made further additions to its equipment of apparatus and chemicals, but still greatly needs numerous appliances and chemical preparations. In several cases, however, it has been possible temporarily to supply needed apparatus from the Chemical Laboratory of Harvard College, and with this aid the work of the department has proceeded without material delays.

The laboratory instruction in the regular first-year course in Biological Chemistry has been extended along the lines already pursued; in addition, certain experiments in metabolism have been added to the regular work of the students, thereby supplementing the lectures much more efficiently than heretofore. These advantageous additions to the course have been made possible by the fact that first-year students now devote all their time in the afternoons, from Monday to Friday inclusive during the second half-year, to the work of this course. Several first-year students, already possessed of extensive chemical training, have been able to devote a part of their time to work of a special nature.

The following papers have been published: —

On the occurrence of oxidative ferments in a melanotic tumor of the liver. By CARL L. ALSBERG. *The Journal of Medical Research*, 1907, Vol. XVI, No. I, p. 117.

Über die Hydrolyse der Proteine Mittels verdünnter Schwefelsäure. By P. A. LEVENE and C. L. ALSBERG. *Biochemische Zeitschrift*, 1907, Vol. IV, p. 312.

Concerning the excretion of phosphoric acid during experimental acidosis in rabbits. By R. FITZ, C. L. ALSBERG, and L. J. HENDERSON. *American Journal of Physiology*, 1907, Vol. XVIII, No. II, p. 113.

Concerning the neutrality of protoplasm. By L. J. HENDERSON and O. F. BLACK. *American Journal of Physiology*, 1907, Vol. XVIII, No. III, p. 250.

The preservation of neutrality in culture media with the aid of phosphates. By L. J. HENDERSON and H. B. WEBSTER. *The Journal of Medical Research*, 1907, Vol. XVI, No. I, p. 1.

Concerning the adiabatic determination of the heats of combustion of organic substances, especially sugar and benzol. By T. W. RICHARDS, L. J. HENDERSON, and H. L. FREVERT. *Proceedings of the American Academy of Arts and Sciences*, 1907, Vol. XLII, No. 21, p. 573.

Concerning position, isomerism, and heats of combustion. By L. J. HENDERSON. *Proceedings of the American Academy of Arts and Sciences*, 1907, Vol. XLII, No. 24, p. 639.

A clinical method for determining the alkalinity of the blood. By HERMAN M. ADLER. *The American Journal of Physiology*, 1907, Vol. XIX, No. I, p. 1; *The Journal of the American Medical Association*, 1907, Vol. XLIX, p. 461.

The cause of infantile atrophy. Deduced from a study of secretin in normal and atrophic infants. By A. H. WENTWORTH. *The Journal of the American Medical Association*, 1907, Vol. XLIX, p. 204.

Concerning glycolysis. By G. W. HALL. *The American Journal of Physiology*, 1907, Vol. XVIII, No. III, p. 283.

The following unpublished investigations have been concluded: —

The influence of change of temperature on the alkalinity of the blood. By L. J. HENDERSON and O. F. BLACK.

A method for the direct determination of heats of reaction. By L. J. Henderson and C. T. Ryder.

A method for the determination of acetacetic acid. By O. F. Black.

Metabolism after castration. By F. H. McCrudden.

Bacteriology. — The following papers have been published during the year: —

Zur schnellen Darstellung der Negrischen Körperchen. By Dr. Langdon Frothingham. *Zeitschrift für Tiermedizin*, 1907, Vol. II, p. 378.

The methods for testing the indol reaction. The cholera-red reaction and the indol reaction. Non-virulent diphtheria bacilli from an infected middle ear. By Dr. E. N. Tobey. *The Journal of Medical Research*, Vol. XV, pp. 301, 305, and 319 respectively.

Pathology. — The following publications have appeared from the Department of Pathology during the past year: —

The origin of cells of the lymphoid cell series and the part they play in pathological conditions. Address before the Harvey Society. By Dr. W. T. Councilman. *The Journal of the American Medical Association*, April, 1907.

The new Harvard Medical School; its ideals and methods. Address before the Harvard Medical Society of New York. By Dr. W. T. Councilman. *The Harvard Graduates' Magazine*, June, 1907.

Some general considerations regarding tumors. Address before the Maine Medical Association. By Dr. W. T. Councilman. *The Boston Medical and Surgical Journal*, August, 1907.

The pathology of diphtheria and the pathology of scarlet fever. By Dr. F. B. Mallory. *Osler's Modern Medicine*, Vol. II.

Die Entstehung der Blutplättchen. By Dr. J. H. Wright. *Virchow's Archiv*, Vol. CLXXXVI, p. 55.

Diseases due to vegetable parasites other than bacteria. By Dr. J. H. Wright. Part V of Vol. I of *Osler's Modern Medicine*.

Lesions of the granule layer of the human cerebellum. By Dr. E. E. Southard. *The Journal of Medical Research*, Vol. XVI, No. 1, pp. 99–116, March, 1907.

Congenital rhabdomyoma of the heart. Report of a case associated with multiple nests of neuroglia tissue in the meninges of the spinal cord. By Dr. S. B. Wolbach. *The Journal of Medical Research*, Vol. XVI, No. 3, pp. 495–519, July, 1907.

The pathology of the brown-tail moth dermatitis. By Dr. E. E. Tyzzer. *The Journal of Medical Research*, Vol. XVI, No. 1, pp. 43–64, March, 1907.

The application of the card-cabinet system in the storage of microscopical slide preparations. By Dr. E. E. Tyzzer. *The Journal of Medical Research*, Vol. XVI, No. 2, pp. 219–221, May, 1907.

On serum anaphylaxis in the guinea-pig. By Drs. F. P. Gay and E. E. Southard. *The Journal of Medical Research*, Vol. XVI, p. 143, May, 1907.

Recent progress in the prevention and cure of tuberculosis. By Dr. F. P. Gay. *International Clinics*, 1907, Vol. I, Seventeenth Series.

The etiology and experimental study of syphilis. By Dr. F. P. Gay. *International Clinics*, 1907, Vol. III, Seventeenth Series, p. 199.

Comparative Pathology. — During the year much time was devoted to the organization of the laboratory in its new quarters. One important object in view was to make it available for fourth-year students as well as graduates engaged in research. In order to carry on carefully-planned pro-research courses satisfactorily much preliminary work must be done owing to the use of living objects such as protozoa, bacteria, and higher animals. This work cannot be entrusted to the students themselves, but must be done by trained assistants and aids. Before such courses can be given, an instructor who is paid enough to give his entire time to the laboratory will be needed.

There is furthermore needed at the Bussey Institution a small building where some one spontaneous infectious disease of the domestic animals may be studied at a time. Such a building should include a small laboratory room for work which must be done near the animals under observation, an autopsy room for large animals, and shelter for a few animals affected with spontaneous or induced disease. It is only through such equipment that the work of this department can be differentiated from that of other existing departments at present. Such a small plant would make accessible to study important problems of disease not now within reach of the human pathologist. It would be useful to sanitary science and to agriculture, it would provide material for the regular courses, and bring the student into contact with actual disease as the much-needed inspiration for painstaking research.

During the year the following work was completed and published:

The degree and duration of passive immunity to diphtheria toxin transmitted by immunized female guinea-pigs to their immediate offspring. By Professor Theobald Smith. *Journal of Medical Research*, Vol. XVI, pp. 359–379.

The resistance of the red blood corpuscles of the horse to salt solutions of different tonicities before and after repeated withdrawals of blood. By

Laryngology. — Asst. Professor Coolidge, Instructor Cobb, Assistant Clark, Assistant Goodale, Assistant Mosher, Assistant Coffin.	66
Syphilis. — Asst. Professor Post, Assistant C. M. Smith.	66
Clinical Obstetrics. — Professor W. L. Richardson, Associate Professor C. M. Green, Instructor Newell, Assistant Swain, Assistant Friedman, Assistant Torbert.	
Dermatology. — Asst. Professor Bowen, Assistant Towle, Assistant Burns.	68
Diseases of the Nervous System. — Professor Putnam, Assistant Waterman.	67
Pediatrics. — Professor Rotch, Asst. Professor McCollom, Clinical Instructor Craigin, Assistant Professor Morse, Assistant Ladd, Assistant Dunn.	69
Psychiatry. — Instructor Cowles.	66
Gynaecology. — Associate Professor Green, Assistant Storer, Instructor Newell, Assistant Young.	65
Surgery and Clinical Surgery. — Professor Warren, Professor M. H. Richardson, Professor Burrell, Professor Bradford, Instructor Thorndike, Instructor Lothrop, Lecturer Gay, Lecturer Monks, Assistant Lund, Assistant Balch, Assistant Crandon, Instructor Porter, Lecturer Harrington, Assistant Codman.	65
Genito-Urinary Surgery. — Lecturer Watson, Instructor Thorndike.	
Clinical Medicine. — Professor Shattuck, Asst. Professor Sears, Assistant Bartol, Instructor H. Jackson.	69

The following elective work was done by the students of the fourth year, under the supervision of the heads of Departments: —

NUMBER OF HALF-COURSES ELECTED FOR 1906–07.

Anatomy	42
Comparative Anatomy	0
Embryology	0
Histology	0
Physiology	8
Comparative Physiology	0
Biochemistry	2
Bacteriology	0
Pathology	6
Neuropathology	3
Hygiene	6
Clinical Medicine	108
Theory and Practice	28
Clinical Pathology	2
Pediatrics	72
Clinical Surgical Pathology	7
Surgery	113
Genito-Urinary Surgery	6
Orthopedics	16
Surgical Pathology	2
Obstetrics	59
Gynaecology	19
Dermatology and Syphilis	8
Neurology and Psychiatry	19
Ophthalmology	0
Otology	1
Laryngology	9
	536

GENERAL STATISTICS OF THE SCHOOL.

New matriculants	95

The whole number of students in attendance: —

In courses for graduates	68
Fourth Class	58
Third Class	54
Second Class	78
First Class	91
Special Student	1
Total	350

Applicants for Degree (February)	7
Applicants for Degree (June)	67
Rejected	3
Graduated	71

Of the 71 students who received the degree of Doctor of Medicine, 16 received the degree *cum laude.*

	Summer Courses.					Graduate Courses.				
	1903.	1904.	1905.	1906.	1907.	1902–03.	1903–04.	1904–05.	1905–06.	1906–07.
Courses taken.	188	177	222	306	281½	57	59½	88	104	93½
Students . . .	148	135	173	192	194	41	49	72	77	68
Receipts . . .	$5280	$4942	$6497	$8798	$8501.50	$1400	$1446	$2207	$2663	$2141

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December 20, 1906, Instructor Gallahue gave a lecture on Dental Materia Medica before the Harvard Odontological Society, Boston.

The Administrative Board, during the winter, gave a series of social gatherings at the School to which the student body and teachers were invited. At each meeting there was a short talk on some topic of general interest, followed by music and a light lunch. The object of these meetings was to bring the students and teachers together and to foster a spirit of loyalty to the ideals of the School.

The loss in the number of students during the past two years is, I think, largely due to our advanced entrance requirements. Our old, unattractive building, however, is a constant and increasing menace to the prosperity of the School. I firmly believe that we have reached the bottom of our decline and are slowly recovering from the effects of our increased requirements, and that with a new building the number of students would rapidly increase.

EUGENE H. SMITH, *Dean.*

BUSSEY INSTITUTION.

To the President of the University: —

Sir, — I respectfully submit the following report on the Bussey Institution for the year 1906–07.

Forty-four students were registered at the Bussey Institution in the academic year 1906–07. This registration was larger than any that had occurred in any one year since the establishment of the School and was naturally the cause of great encouragement to the Instructors. In the previous year (1905–06) the registration was twenty-seven, and in 1904–05 it was twenty-three. As was to be expected, perhaps, in so large a number of candidates there was a tinge of disappointment in the fact that a few of the newcomers turned out to be not wholly desirable additions to the Class. In any event, however, the proportion of undesirables was so small that their existence hardly needs to be mentioned except as an item of history relating to the growth of the School.

Actually, thirty-seven of the enrolled men were proper, professional students of Agricultural and Horticultural subjects, while there were no more than seven in the list who were neither professional, studious, or legitimate in any sense. These men had sought to connect themselves with the University, for social ends, by a loose attachment to one of its Departments. After satisfying themselves that they were in a false and unprofitable position, they gradually withdrew from the School to the advantage of all concerned. It is a satisfaction to know that it will be easy henceforth to prevent any trouble such as this, now that the possibility of its existence is recognized and understood.

In addition to the Bussey students proper, sixteen students in Landscape Architecture, enrolled at Cambridge, came to the Bussey Institution as guests on stated days to attend lectures on Horticulture.

The degree of Bachelor of Agricultural Science was conferred upon six men at Commencement.

Methodical courses of instruction in Agriculture, Horticulture, Cattle Breeding, Cattle Feeding, Dairying, Agricultural Natural History, Botany and Practical Work in the Greenhouses, Agricultural Chemistry, Qualitative Chemical Analysis, Trigonometry, Land Surveying and Rural Construction were given by Messrs. Watson, Morse, Paige, Clarke, Dillingham, Robinette, Shedd, and Storer, throughout the year.

F. H. STORER, *Dean.*

THE LIBRARY.

To the President of the University: —

Sir, — I beg to submit this, my tenth annual report on the Library, covering the year 1906–07.

The chief event of the year has been the construction of a two-story addition along the north side of the east stack. The concrete foundations were laid late in the autumn of 1906; work was resumed early in the spring of 1907; and, by the middle of the summer, the builders were ready to throw together the new part and the old by removing the outside wall of the old delivery room and by cutting doors in other parts of the building. The impending changes in the delivery room made it necessary to close the Library for four weeks, from August 12 (after the end of the Summer School session) to September 7, — the first time the Library has been closed in more than thirty years. By means of printed notices addressed to other libraries and institutions, I tried to forewarn scholars in the spring that this Library would not be accessible during a part of the summer, but in spite of this, a number of professors and students from other places appeared, whose expected summer's work would have been seriously blocked by their being shut out of the Library, and in several cases admission to the book-stack was granted during the period of the Library's closure. At the closing of the Library, those who had been working here were permitted to borrow all the books they could profitably use outside, and during the four weeks books were constantly being sent out by mail or express in response to requests received through the postoffice. In this way the inconvenience was minimized so far as possible.

The improvement in the delivery room is even greater than was expected. For the first time the Library greets the visitor with an appearance of some dignity and amplitude. The old delivery counter has been cleared away, giving abundant space for passing back and forth and for consulting the catalogues. A new catalogue case against the east wall has permitted an expansion of the catalogue, and this in itself tends to diminish any crowding among those who use it. The repainting of the walls of this part of the room has made the light even better than before, in spite of the twenty-five feet added beyond the old windows on the north. The new delivery desk is placed in the new part of the room directly opposite the entrance, and is far enough from the back wall (which is completely filled by broad, high windows) to give convenient space for the carrying of books back and forth, the opening of bundles, sorting of mail, and checking of periodicals, for the work-table of the recording clerks, and for the desk of the Superintendent. The work of recording or charging loans has been lightened and expedited by a counter holding a row of twelve sliding trays, any one of which can be easily brought within reach of the clerk as she sits before her desk.

The other rooms in the addition are not quite completed, owing to various unforeseen delays, but they promise to be admirably adapted to the uses for which they are intended. I have had the satisfaction of planning the disposition of every foot of floor space and wall space, and have aimed at practical efficiency in every detail.

Opening from the delivery room is a small reference and reading room, with two generous tables and shelving on both side walls. On one side of the room will be bibliographical reference books such as supplement the subject catalogue; on the other side a few encyclopaedias, biographical dictionaries, and other general books of reference, such as have been found especially useful to inquirers in the delivery room and to members of the library staff, but the chief collection of reference books still remains in the reading room upstairs. Here also is a case of twenty-four drawers for the use of professors who wish to have a place in the Library where they can leave books and papers under lock and key. The greater part of these drawers are already assigned. For many years we have placed on open shelves in the delivery room the more interesting of the new accessions, in order that they may be seen, examined, and borrowed with the least possible formality. In this reference room we now expect to place on view for at least a week *everything* that comes into the Library — books, pamphlets, and annual reports, and even periodicals and society transactions, except such as are ordinarily kept in the periodical alcove in the reading room. By looking over the books and pamphlets placed on these shelves once a week, a reader will be able to keep track of everything added to the Library.

The next room, opening out of the reference room, will be used by members of the catalogue department, desks for six persons being provided. Shelves and cupboards along the walls give space for some reference books and for work in progress or waiting to be taken up.

The third room will be known as the collating room and takes the place of the old room of the same name just outside the librarian's office. Here all the counter space possible is provided for the checking and arrangement of large invoices of books received from abroad. Here also are conveniences for pasting in the bookplates that indicate the source (fund or gift) of each book added to the Library. The bookplates, of which a great variety are naturally in use, are kept in a new case of drawers and are filed on edge like catalogue cards and in alphabetical sequence, an arrangement far more compact and convenient than was in use formerly. The fourth and last room on this floor will be occupied by the shelf department, which has now for some years been encamped in an alcove of the west stack, where its work has been performed under cramped conditions, and where it has itself been a source of annoyance to readers in the stack. Two large revolving bookcases, constructed for the purpose, will hold most of the shelf-lists and will keep them easily accessible to the two assistants who use them most. An elevator shaft, connecting all floors of the Library except the topmost, opens both into this room and into the stack, but is not yet provided with an elevator, the hydraulic elevator as planned having been found to be impracticable in this position, and one run by electricity being too expensive to install.

On the second floor, which is on the same level as the fourth floor of the east stack, or a few steps above the level of the general reading room, we have at the west end, opening from both the reading room and from the stack, a large room simply but handsomely finished in oak, with panelled walls and oak book-cases. This we shall call the Treasure Room, and here will be collected all the rare and precious volumes which have to be kept under lock and key, and which must be used under proper supervision. Those who desire to consult these books will accordingly use them here, instead of taking them off to some other part of the Library. The western half of the room is kept open for tables; in the eastern half floor cases project between the windows from the outside wall and at corresponding intervals from the opposite inside wall, making pleasant alcoves for quiet study. At the eastern end, there is to be a series of twenty-three sliding cases placed one in front of and directly contiguous to another, the ends of all being against the wall. Each case, in order to make its contents accessible, must be rolled out from between its next neighbors. By this means great economy in storage is attained. We may say, for example, that while ordinary shelving would give us a mass of books against the wall perhaps eight inches thick (the average width of a book), this gives us a mass of books of similar extent but over three feet thick, each case being a little more than three feet in length. We owe the suggestion for this method of construction to the Bowdoin College Library, where Mr. Little has had a few cases in his office built on a similar plan. It will be noticed that the plan differs radically from the well known sliding cases of the British Museum. Those hang in the broad aisles and are pushed from one side to the other in a direction at right angles to their length. These run in the same direction as their length, and when not in use form a solid mass against the wall. It is to be expected that the plan will be found particularly well adapted to collections such as are to be kept in our Treasure Room, — that is, to books not in frequent use and of such a character that they should be protected from unauthorized handling. After the cases have been well tested and found to be satisfactory, I shall be glad to communicate to other libraries full particulars in regard to details of construction.

The other cases in this room having been completed before the sliding cases were finished, I was glad to use the room first for an exhibition of memorials of John Harvard and his contemporaries, in connection with the recent celebration of the three hundredth anniversary of Harvard's birth. Since the Library takes its origin from the little collection bequeathed by John Harvard, it was fitting that the Library should take some part in the celebration of his birthday, and should attempt to display whatever might throw light upon the personality and environment of its founder.

A list of his books is fortunately preserved in the earliest record book of the College, written by the hand of the first President.* Mr. Potter has studied carefully the brief titles of this rough list, and has succeeded in identifying a large proportion of them. Although only one, or at most two, of the identical volumes bequeathed by Harvard survived the fire of 1764, and have come down to our day, it was found that many of his books were now represented by other copies on our shelves. By drawing from these and by borrowing from the Boston Public Library, the Boston Athenaeum, the American Antiquarian Society, the Trinity College Library, the Case Library of the Hartford Theological Seminary, the General Theological Seminary, New York, and from some private libraries, Mr. Potter was able to bring together about 180 volumes of the 373 which a careful examination of the list shows was about the number received from Harvard's bequest. The collection formed one of the most interesting portions of the exhibition. Mr. Potter notes the following facts in regard to it: —

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* Printed in the Library's Bibliographical Contribution no. 27, 1888: A few notes concerning the records of Harvard College, by Andrew McFarland Davis, pp. 7–13.

> "Harvard's library was mainly theological. About seventy per cent. of his whole collection may be classed as theology, and of this, over half consisted of biblical commentary or exegesis. It is interesting to note that there were several Roman Catholic works, and also that there was comparatively little religious controversy. In other fields, we find that the classics are represented by 27 volumes, both in the original and in English translation; grammars and dictionaries form a group of 22 volumes; half a dozen volumes may be classed as science; logic claims seven volumes; English literature is represented by only five works, and history by four; and there are two books in law and three or four in medicine. As for languages, the library was about equally divided between English and Latin, although there were several works in Greek and in Hebrew. Apparently there was nothing in either French or German."

Mr. Tillinghast contributed to the exhibition by studying John Harvard's contemporaries in England and America, and bringing together books by or about them, with portraits and autographs so far as possible. It was found that the Library shelves yielded many interesting maps and views, such as the maps, or rather bird's-eye views, reproduced by the London Topographical Society, especially that of N. J. Visscher, drawn in 1616 when John Harvard was a boy of nine, and showing in detail a view of the houses in the Borough Road, directly opposite that in which his father then lived. Views of St. Saviour's, Emmanuel College, South Malling Church, and other places connected with Harvard's brief life were also shown. Just at the close of the exhibition, we received from England photographic facsimiles of the more important documents connected with Harvard, his mother's and his brother's wills, records from parish registers, copies of leases, etc. For procuring these, we are indebted to Professor Gross, now in London. The Rev. Dr. McKenzie lent us for exhibition the original manuscript of Thomas Shepard's autobiography, in which he speaks of Harvard's death and of his bequest; also a volume of his manuscript sermons, one of which was the election sermon of 1638, doubtless listened to by Harvard. Professor Palmer lent several early editions of English poets, contemporaries of John Harvard in Cambridge, and Mr. John Boyd Thacher, of Albany, kindly sent a number of autographs, English and American, drawn from his great collection. We were fortunately able to borrow from the Botanical Museum two show-cases precisely adapted to our needs, and in these some of the rarer volumes were displayed.*

The room is in most respects admirably suited to be used as an exhibition-room, and it would be easy to maintain here a series of interesting exhibitions throughout the year. But, desirable as this would be, the principal purpose of the room, namely, to provide for the use as well as the preservation of the books shelved in it, makes it necessary to protect its quiet as a place of study. I hope, nevertheless, that it may not prove impossible to use it occasionally for exhibition purposes.

To return to our survey of the new building, the room adjoining the Treasure Room, but not connected with it, is the Map Room, in which we expect to be able to bring together our whole great collection of maps and atlases, now widely scattered in different parts of the Library. The map portfolios are disposed on sliding shelves in cases about five feet high which line two sides of the room. Most of the atlases are shelved in two tiers above these cases; others will be placed in a horizontal position on sliding shelves. A sloping counter in front of the windows, a broad table in the middle of the room, and an additional floor case for larger maps and for reference books complete the equipment of the room. A broad skylight in the roof gives ample light in every part. I should like to see placed in this room a memorial tablet to my predecessor, Mr. Justin Winsor, whose eminence as a cartographer, and whose special interest in the Library's map collection, would make this the most appropriate place in which to commemorate him.

The third room on this floor, the corner room, is a class-room for the convenience of small classes which require to use at their meetings a large number of books from the Library's shelves. Shelves along one wall, a long table in the middle of the room, and three smaller tables, comprise the necessary furniture.

The space over the sliding shelves in the Treasure Room forms an extension from the fifth floor of the stack, where a few additional tables for study will be placed and where typewriters may be shut in, so as not to disturb readers with the continuous click of their machines.

In the basement, we get, at the east end, a room where boxes and bundles may be delivered by the express and unpacked. Here are also four generous store-closets, where the chore-women keep their implements, and where stationery and other supplies are under lock and key.

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* I may add that, during the period of Mr. Cobden Sanderson's lectures on book-binding and book-making, one of these cases was used to exhibit some of the beautiful work of his press and bindery, and the room was opened two evenings at the close of his lecture, in order that the books might be examined by those who attended.

Next to this is a storeroom where duplicates will be shelved until disposed of, and where large gifts may be temporarily placed while the volumes are being looked up on the catalogues. Such a storeroom is not the least among the conveniences provided by the addition; duplicates and waiting gifts have hitherto had to be stored wherever empty shelves could be found for them here and there in the stack.

The rest of the basement is occupied with shelves to which nearly the whole of our collection of Parliamentary Papers has been already transferred. Better basement windows and more table space give better facilities for using this valuable and much sought collection, and the nine rows vacated by it in the first floor of the stack will be filled by the Library's works on bibliography, which we have not heretofore been able to bring together and classify.

Some further desired changes in the old basement, on the south side of the stack, have not yet been begun, because it was not clear that the means at our disposal would suffice, but work on them should not be further delayed. These changes will give us additional shelving for our pamphlet collection and a small but tolerably convenient lunch-room for the ladies of the staff.

The material of which this addition to the Library has been built and the method of construction are interesting, and suggest what may possibly be the best method of enlarging the Library in the future. The foundations, floors, and roof are of reinforced concrete mixed and laid on the spot; the walls are of concrete blocks moulded at the manufacturer's, of a color to match the granite of the old building, and laid in courses in the same manner that stone is laid. The outside effect is admirable, the saving in expense over granite very considerable, and the strength of the wall superior to what is attained by the usual brick-lined stone construction of the present time. The masking of the old north wall of the east stack by the new outside wall has greatly improved the appearance of the building, and Professor H. L. Warren, the architect of the addition, has studied the possibility of making further extensive additions of the same kind to the present Library, so as to equip it satisfactorily for many years to come.

In my last report, as in several other reports, I called attention to the fact that in recent years increase in the staff has by no means kept pace with the increase in work to be done, — an increase caused both by larger annual accessions, by a larger public to be served, and by the more crowded condition of the Library shelves. Indeed, the staff is hardly larger than it was ten years ago, when I became librarian, yet the accessions of the last two years, 1905–07, have been more than half as large again as those ten years ago, 1895–97. With the provision of larger working rooms for the staff, the need for an increase in numbers becomes more imperative, in order that we may catch up with arrears of work in cataloguing and in the care of the pamphlet files, and may be able more promptly to forward book orders, pay bills, dispose of duplicates, and handle gifts. The bringing together of our rare books into the Treasure Room also ought to be followed by extra work upon them which might profitably engross one person's time for a year.

The service which this Library can render other libraries by lending books increases from year to year. The list of institutions to which books were sent in the course of the last year is given at the foot of the page,* and it is interesting to notice how they are scattered from one end of the country to the other. This portion of the Library's work has become no small task, since probably no day goes by that does not bring one or more applications, but I feel that the service rendered to American scholarship is of the greatest value. What has been already done in this direction, however, only suggests, as I pointed out in my last report, how much more might be done if distinct provision could be made for it. I have given the matter much thought during the past year, and have worked out a plan by which a moderate endowment might yield great results to the benefit of all American colleges. I believe that a central lending library, established in connection with the Harvard Library, to furnish books so expensive or so rarely wanted by scholars that the smaller college libraries cannot afford to own them, would be of the very greatest service to all American libraries, making important works accessible to the smallest and supplementing usefully the collections of the greatest; and I believe that such a library could probably be established here more economically and advantageously than elsewhere. I wish that some generous lover of learning might be induced to take up this project, get it studied carefully by a committee of librarians and scholars, and furnish the means for its realization.

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* *Colleges and universities:* Adelbert, Amherst, Brown, Bryn Mawr, Clark, Columbia, Cornell, Dartmouth, Hamilton, Haverford, Hobart, Johns Hopkins, Lafayette, Lake Forest, Leland Stanford Junior, Middlebury, Mount Holyoke, Northwestern, Ohio State, Princeton, Radcliffe, Simmons, Smith, Swarthmore, Syracuse, Trinity, Vanderbilt, Vassar, Wellesley, Wesleyan, Williams, and Yale; the universities of Arizona, California, Chicago, Cincinnati, Colorado, North Dakota, Illinois, Indiana, Kansas, Maine, Michigan, Missouri, Nebraska, New York, Pennsylvania, Texas, Vermont, and Wisconsin; Andover and Hartford Theological Seminaries; Adelphi College in Brooklyn, the Bradley Polytechnic Institute, Peoria, Ill., the Jacob Tome Institute, Port Deposit, Md., New Hampshire College of Agriculture, Durham, N. H., Phillips Exeter Academy, and the Eastern Illinois State Normal School; and in Canada, McGill University, the University of Toronto, and Mt. Allison College, Sackville, N. B.

Public Libraries: The public libraries of Boston, Cambridge, Cincinnati, Cleveland, Fitchburg, Hartford, Lowell, New Bedford, Portsmouth, Providence, St. John, N. B., Worcester, and Yarmouth; the Library of Congress; the John Carter Brown Library, Providence; Forbes Library, Northampton; Maine State Library; Millicent Library, Fairhaven; Morrison-Reeves Library, Richmond, Ind.; the Philadelphia Library Company; and the Redwood Library, Newport.

The permanent resources of the Library have been strengthened by the establishment of a new fund resulting from the bequest to the Library of five thousand dollars by Stephen Salisbury, of Worcester, of the Class of 1856. The Library has already enjoyed for fifty years the use of a fund of the same amount given by Mr. Salisbury's grandfather, Stephen Salisbury, of the Class of 1817. The income of the latter fund is restricted to the purchase of books "in the Greek and Latin language, and in other languages illustrating Greek and Latin books." The bequest just received can be used for any purpose connected with the Library.

The accessions to the libraries of the University for the year, and the present extent of each are shown in the following table: —

ACCESSIONS.	Volumes added.	Present extent in	
		Volumes.	Pamphlets.
Gore Hall (College Library)	14,702	478,583	331,000
Law School	6,298	102,826	11,185
Divinity School	581	36,360	9,505
Medical School	379	12,788	23,820
Dental School	3	986	10,000
Bussey Institution	145	4,621	16,491
Museum of Zoölogy	1,097	43,518	38,026
Peabody Museum	115	3,472	2,435
Astronomical Observatory	348	12,198	24,246
Gray Herbarium	576	10,392	8,458
Arnold Arboretum	1,508	15,993	. .
Twenty-eight Special Reference Libraries	2,257	46,875	. .
Total	28,009		
Deduct, transfers between Gore Hall and Department Libraries	280		
Totals	27,729	768,612	475,166

The map collection in the College Library contains 25,235 sheets, and is not included in the above enumeration.

The additions to the College Library for the last five years have been as follows: —

ADDITIONS TO COLLEGE LIBRARY.	1902–03.	1903–04.	1904–05.	1905–06.	1906–07.
Volumes by purchase or exchange .	7,731	7,870	7,746	11,012	7,520
Do. by binding serials	1,152	1,312	1,760	1,767	1,478
Do. by binding pamphlets . . .	736	1,104	1,098	943	852
Do. by gift	7,358	12,009	6,031	4,350	4,852
Total volumes added	16,977	22,295	16,635	18,072	14,702
Maps in sheets	1,064	354	2,001	1,112	512
Pamphlets by purchase or exchange	1,950	1,217	1,193	2,829	1,899
Do. by gift	13,441	14,259	14,951	14,404	14,128
Total gifts (vols. and pams.) . . .	20,799	26,268	20,982	18,754	18,980

The number of volumes bought is far less than in the previous year, which included Dr. Lichtenstein's purchases abroad, and is also somewhat less than the usual number in recent years. This diminution is due to the reduction in the appropriation for books made by the Library Council, and occurred in spite of the large sums of gift money which were in our hands last year. The greater part of this money, however, was used for the purchase of expensive books, so that it caused no very marked difference in the number of volumes acquired.

Of the additions to the coin collection, the most considerable was a group of 193 coins (silver and copper) received from the Rev. George P. Knapp, of the Mission School, in Harpoot, Turkey. The greater part of the coins are from Asia Minor, and among the 193 pieces, 67 emperors are represented. Almost all are new to the Harvard collection. Mr. Knapp writes to Dr. Storer, the curator of the collection, "I wish I might do more for this coin and medal collection, but, as a matter of fact, my resources are now exhausted. If, however, some friend of the collection would like to put a small fund at my disposal, I should be very glad to do what I could to make further collections. At the same time, I should be glad if a good manual of numismatics were sent me, and it were indicated in this what class of coins are specially desired. Probably in that way I could help a good deal in getting new coins for the collection." Mr. Knapp seems to have somewhat unusual facilities for collecting coins, and I wish that I were able to place in his hands the means to gather more.

The year has been remarkable for the number and extent of the gifts of money received, to be spent for special purposes. Those who have for the last two or three years been giving us annually a sum for some special purpose have continued their gifts: Mr. Lawrence S. Butler, '98, of New York, for books on Paris; Mr. Harold J. Coolidge, '92, of Boston, for books on China; Mr. W. Bayard Cutting, Jr., 1900, of New York, for books on Florence; Mr. Ellis L. Dresel, '87, of Boston, for German Drama; Mr. James Loeb, '88, of New York, for labor periodicals; Mr. E. S. Mullins, '93, of Pittsburg, for books on Folklore; Mrs. George A. Nickerson, of Dedham, for books on Folklore; Mr. William Phillips, 1900, of Boston, now of the State Department, Washington, for books on London; Mr. Horace B. Stanton, 1900, of Boston, for books on Molière; Mr. Lucius C. Tuckerman, '97, of Boston, for books on Mexico.

Professor A. C. Coolidge, '87, has spent, in addition to his former gifts, over $1300 for the Hohenzollern Collection, for books on French History, Morocco, Turkey, etc.

Mr. Edwin V. Morgan, '90, United States Minister to Cuba, formerly Minister to Korea, has continued to allow us to add books on Korea at his expense.

Mr. John Harvey Treat, '62, of Lawrence, has added to his former gifts for books on the Catacombs and Christian Archaeology, $250 to be spent for the same purpose.

Mr. Edgar H. Wells, '97, of Boston, has continued his former gifts for special books on English Literature of the 18th century.

Mr. Alain C. White, '92, of New York, has repeated his gift of $200, to be spent for rare books at the discretion of the Librarian.

The Saturday Club of Boston has appropriated to our use from its surplus income, $1,000 to be spent for books, and we have used the money for a number of expensive works — collections of portraits (now made more available than before through the "A. L. A. Portrait Index"), works on illumination, reproductions of Dutch paintings, and the expensive but indispensable catalogue of the Church library of Americana.

From Mr. Ernest B. Dane, '92, of Brookline, we have received $5,000, to be spent on English Literature and English History. This generous sum has been divided among different members of the English Department, to be used for special classes of literature. Professor Kittredge has ordered English Literature before 1660, and works on Shakespeare; Professor Baker, English plays before 1660; Mr. Edgar H. Wells, English Literature from 1660 to 1780; Professor Neilson, modern English Literature, 1780–1895; Dr. C. N. Greenough, books of "characters" and periodicals; Professor Robinson, Celtic literature; and Dr. Merriman, English History. Other subscriptions through Dr. Merriman, for the purchase of books of English History, have been received, amounting to $250.

Mrs. E. A. Hills and Mr. George E. Hills, '97, of Boston, have contributed to the purchase of books on the Dutch East Indies.

Mr. W. W. Naumburg, '89, of New York, has given $100 for books on Shakespeare, and Mr. Frank G. Thomson, '97, of Philadelphia, $200 for English Literature.

Subscriptions for the purchase of books on Banking, amounting to $137, have been received through Assistant Professor A. P. Andrew; and for Economic literature, amounting to $105, through Professor Taussig.

Mr. W. Bayard Cutting, Jr., in addition to his gift for books on Florence, has interested himself during the last winter in collecting books relating to Switzerland, and several shipments have been received, amounting in all to 352 volumes. Mr. Cutting spends his winters at St. Moritz, and has given his personal attention to the selection of these books, with the result that what he has sent has been carefully chosen and has included many important sets of historical documents. A part of the books were paid for by Professor A. C. Coolidge; but the greater part come to us as a gift from Mr. Cutting.

Dr. Hiram Bingham, Jr., Curator of South American History and Literature, spent a part of last winter travelling in South America, and while there collected a large number of books for the Library. These are in part a gift from himself, in part a gift from Professor A. C. Coolidge, and the remainder were purchased from an appropriation made by the Library. The collection, all of which has not yet reached us, contains many works which we should not have been able to obtain in any other way, and which we acquired at very low prices.

A collection of Cuban works, numbering about one hundred volumes and pamphlets, and including many rare early works, was bought for us by Mr. Enrique de Cruzat Zanetti, '97, of New York.

From Mr. Martin Brimmer's library, by bequest of Mrs. Brimmer, we received twenty-four volumes of rare books, many of them in handsome bindings. They included first editions of Voltaire, Rousseau, Montesquieu, and Montaigne, the Aldine editions of Horace and Petrarch, and other treasures.

From the estate of Professor Ephraim W. Gurney, a final instalment of his library, numbering 242 volumes, has been received. This makes the total number of volumes received from Professor Gurney's library, 7,750.

Mr. Joseph H. Clark, '57, of Boston, has sent us many volumes of recent French, Italian, and Spanish fiction, and has also provided for the expense of binding the same.

Mr. H. Nelson Gay, of Rome, Curator of Italian History of the 19th Century, has continued to send us books and pamphlets on the Risorgimento period, and would have spent to excellent advantage the Library's modest appropriation for this subject as in former years, had it not been necessary to suspend the appropriation for the current year.

Miss Woodman, of Cambridge, has allowed the Library to select from her father's valuable collection of pamphlets, systematically preserved through many years, all that would be useful for our shelves.

Mr. N. V. Tchaikovsky, a prominent Russian revolutionist lately resident in London, presented 162 volumes and pamphlets, including a full set of the periodical, "Revolyutsionnaya Rossiya," being everything published by the Socialist-Revolutionary Party since 1902.

From the Russian Goverment, through the United States Minister, Hon. George von L. Meyer, the Library received a collection of the documents and proceedings of the Duma; also the publications of the first general census of Russia, that of 1897, and Statistics of Russian Railways.

One of the most interesting and precious acquisitions of the year was a perfect set of the original issues of "The Spectator," a copy which formerly belonged to Edmund Malone, the actor. Mr. W. R. Castle, Jr., the Assistant Dean, was chiefly instrumental in procuring these volumes for the Library, and shared with Professor Kittredge and Messrs. C. G. Osborne, 1909, and H. E. Widener, 1909, a part of the expense, the remainder being made up from the Dane gift and from the income of the Child Memorial Fund.

Mr. Henry Arthur Jones, of London, when he visited the College in November, 1906, brought with him, as a gift, his vellum copy of the Kelmscott "Chaucer," the greatest printing achievement and the last finished work of William Morris.

The Library has received numerous other valuable and interesting gifts, but they are too many to be mentioned in detail. A more complete statement of the gifts of money received will be found in the Treasurer's report.

The purchases of the year have naturally included a very unusual number of rare and precious volumes in early English literature, bought from Mr. Dane's gift. The additions in the field of French History have also been extensive. Professor Coolidge, on being absent from his work for a second year on the Hyde lectureship in France, authorized us to buy at his expense, $1,000 worth of books on French History, on condition that the Corporation would appropriate another $1,000, to be spent for the same purpose. Only a part of the $2,000 thus made available has been spent during the past year, but the remainder will probably be used during the year now current. In selecting books to be bought, we have profited by the advice of Professor Haskins, and have bought mainly books on early and local French History, with the addition of a few important sets. To the Hohenzollern Collection 762 volumes have been added, many being in continuation of sets already bought.

An interesting collection of material on anagrams, gathered by the late Walter Begley, Vicar of East Hyde, England, an author of works on anagrams, was bought at a moderate price, and constitutes a unique collection relating to a small, but interesting, subject.

Under the appropriation for Folklore, and from the gifts of Mrs. Nickerson and Mr. Mullins, we have bought a number of early books on alchemy and witchcraft and several collections of ballads and chap-books. Scotch history and literature have been further added to from the gift of Mr. Alexander Cochrane, reported last year. The larger part of Mr. Phillips's gift for books on London has been spent for works on the London city companies. A number of books, copies of which had formed part of John Harvard's library, have been picked up from time to time at trifling expense, and have been paid for by an anonymous friend.

The greater part of the income of the Norton Fund was needed to pay for a manuscript of Donne's Poems, received the previous year; but several minor works by Donne have been bought, and a fine copy of Eusebius, "De præparatione evangelica," printed by Jansen in Venice in 1470.

A list of some of the more important recent accessions to the Library is given as an appendix to this report in its separately printed form.

SPECIAL REFERENCE LIBRARIES.

The present extent of these libraries is as follows: —

Special Reference Libraries.	Permanent.	On Deposit.	Totals.
1. Chemical Lab. *Boylston Hall*	1,052	1,060	2,112
2. Physical Lab. *Jefferson Phys. Lab.*	53	369	422
3. Botanical Lab. *University Museum*	589	124	713
4. Geological Lab. *Do.*	124	. .	124
5. Mineralogical Lab. *Do.*	546	231	777
6. Phys. Geography Lab. *Do.*	344	226	570
7. Zoölogical Lab. *Do.*	278	. .	278
8. Classics. *Harvard Hall 3*	4,071	148	4,219
9. History. *Harvard Hall R. R.*	3,393	114	3,507
10. United States History. *Harvard Hall R. R.* . .	921	8	929
11. Political Economy. *Do.* . .	1,417	21	1,438
12. Social Ethics. *Emerson Hall*.	2,222	6	2,228
13. Child Memorial (English). *Warren House* . . .	4,601	90	4,691
14. Lowell Memorial (Romance). *Do.* . . .	1,592	6	1,598
15. German. *Do.* . . .	1,345	. .	1,345
16. French. *Do.* . . .	2,603	. .	2,603
17. Sanskrit. *Do.* . . .	945	30	975
18. Semitic. *Semitic Museum*	1,575	. .	1,575
19. Mathematics. *Sever 22*	660	80	740
20. Mining and Metallurgy. *Rotch Laboratory* . . .	49	21	70
21. Engineering. *Pierce Hall*	6,836	527	7,363
22. Music. *Holden Chapel*	479	. .	479
23. Philosophy (Robbins Library and Psychol. Lab.). *Emerson Hall.*	2,844	43	2,887
24. Education. *Lawrence Hall*	5,904	. .	5,904
25. Fine Arts (incl. Gray and Randall Coll.). *Fogg Museum*	994	3	997
26. Architecture. *Robinson Hall*	1,146	13	1,159
27. Preachers' Library. *Wadsworth House*	95	. .	95
28. The Study. *Phillips Brooks House*	59	. .	59
29. Social Service Committee. *Phillips Brooks House*	128	. .	128
Totals	46,875	3,110	49,985

The total number of volumes added to these special libraries in the course of the year has been 2,235, the largest additions being in History, 268; Social Ethics, 412; Engineering, 214; Education, 261; Philosophy, 274 (from the Robbins gift).

We are again indebted, as in two previous years, to Dr. K. G. T. Webster, who bore the expense of opening the libraries in Warren House during the evening from the close of the spring recess to the end of the year.

The books shelved in the reading-room, together with those in the various special reference libraries in Harvard Hall, Warren House, and elsewhere, amount altogether to over 74,000 volumes to which direct access can be had by all students to whom they are of value. In addition the library of the Harvard Union now offers to its members over 7,000 books, mainly literature, biography, history, travel, and sport.

The extent of these open reading-room collections and their growth is shown in the following table: —

OPEN COLLECTIONS.	1902–03.	1903–04.	1904–05.	1905–06.	1906–07.
Bound Periodicals	3,266	3,341	3,516	3,288	3,354
Reference Books	4,471	4,645	4,685	4,800	4,904
Reserved Books	10,398	10,514	10,904	11,055	11,125
U. S. Documents	4,523	4,300	4,481	5,199	5,355
Totals	22,658	22,800	23,586	24,342	24,738

Cards of admission to different sections of the book-stack continue to be given, on recommendation of an instructor, to all advanced students who need to go directly to the shelves for purposes of investigation in connection with their work. Such students have the same facilities for the examination and study of all the resources of the Library, in their own departments, that the officers of instruction enjoy. The use of these cards of admission to the book-stack is shown in the following table: —

ADMISSION TO THE BOOK-STACK.	1899–00.	1900–01.	1901–02.	1902–03.	1903–04.	1904–05.	1905–06.	1906–07.
History	112	81	90	118	92	122	105	117
Science	30	36	37	45	38	28	36	36
Art and Archaeology (including Music)	33	33	55	46	42	57	28	47
Literature	85	74	80	125	144	107	131	129
Classics	70	58	70	73	62	57	58	50
Philosophy	19	22	27	31	22	18	11	12
Theology	1	1	14	2	9	8	13	6
Economics and Sociology	13	13	16	33	26	38	23	46
Education	4	7	4	25	10	11	9	9
Geography	3	9	15	6	7	5	3	8
Publ. of Learned Societies . . .	. .	16	8	7	6	5	1	1
Total cards given	370	350	416	511	458	456	418	461
Total individuals admitted . . .	320	257	301	366	315	354	335	356
Total times of use	6,898	6,067	5,551	6,244	6,413	7,172	6,124	5,992

The number of individuals admitted is less than the number of cards given out, because the same person often receives permission to use different parts of the book-stack.

As a result of the building of the new addition, artificial light now has to be used at many of the tables in the stack hitherto well lighted from the windows, but on the fifth floor, a few well lighted additional tables have been placed in the gallery which opens from this floor, and on the third floor, additional tables will be placed on the south side of the stack, in place of the map cases, the maps from which have now been removed to the Map Room. On the second floor some table space will also be gained on the south side when the wooden cases which have been built in here from time to time are pulled out and the old collating-room changed.

During the summer of 1907, in addition to the students of the Summer School, 54 professors and instructors from 36 different colleges came to Cambridge for purposes of study, and were made welcome in the Library. This number is naturally somewhat smaller than in other recent years, because the Library was closed during part of the summer, and notice of the intended closing had been widely circulated. 1,466 volumes have been sent from the Library to 82 different colleges, schools, and public libraries, and in some cases to individuals residing at a distance. This is a somewhat smaller number of volumes, but a larger number of institutions, than was reported last year. So far as is known, no serious inconvenience has been caused to scholars working in this Library by the temporary withdrawal of books wanted elsewhere, and it is a satisfaction to be able to place books which are not often wanted here in the hands of persons who actually need them.

Radcliffe College has borrowed 980 volumes for the use of its students. Application for these books is made through the Librarian of Radcliffe, and the books are carried back and forth between Radcliffe College and the Harvard Library by a messenger. Radcliffe students also visit the Library, and have the use of one table in the smaller reading-room. For use at this table, 955 books were sent for from the stack and 1,081 volumes were taken from the reserved shelves in the reading-room. In special cases, Radcliffe students are also allowed access to the stacks, but the pressure for reading space in the stack is so great that their number is necessarily limited. It is to be expected that the Radcliffe library, after it has occupied its new building, will itself be able to offer almost everything which is to be found on our "reserved" shelves, so that Radcliffe students will have small occasion to ask for these books which are in almost constant use by our own students.

The Sunday use of the reading-room is shown in the following table. The room is open, to readers only, every Sunday in term-time from one to half-past five in the afternoon.

SUNDAY USE.	1899–00.	1900–01.	1901–02.	1902–03.	1903–04.	1904–05.	1905–06.	1906–07.
Sundays open	35	35	36	35	36	34	34	34
Users	4,846	5,471	4,909	5,073	4,678	4,953	4,737	4,623
Average	138	156	136	144	129	145	139	136
Highest number . . .	236	226	225	227	173	187	228	207

In November, 1906, a petition was presented to the Library Council, signed by twenty-five officers of the University, asking that the Library stacks might be open during the evening hours to members of the Faculty and to such instructors as might apply for the privilege. It was represented that the closing of the stacks at a quarter after five was a distinct hardship, breaking up and curtailing the late afternoon and evening hours — the only periods of consecutive study which most members of the Faculty possess. Inquiry was made of other leading universities — of Columbia, Cornell, University of Michigan, University of Pennsylvania, Princeton, and Yale — and it was learned that the hours of opening of all these libraries were more liberal than those of the Harvard Library, extending from 8 or 8.30 in the morning until 10 or 11 o'clock at night, and that in every case but one, the delivery-desk and the book-stacks were open during the same hours as the general reading-room. On January 1, 1907, with the approval of the Library Council, the book-stack was opened to members of the Faculty of Arts and Sciences and other instructors (including assistants and Austin Teaching Fellows) during the evening hours when the Library is open. In order not to increase the expense for service, those persons who wished access to the stacks in the evening were required to obtain in advance cards of admission to be shown to the night janitor, since he could not be expected to know them personally. Access to the stacks during the evening has doubtless been a real convenience to those who have taken advantage of it, but it is found that no large number of persons care to make use of the evening hours.

SHELF DEPARTMENT.

Mr. Frank Carney, who has charge of the current work of the shelf department, reports 15,504 volumes permanently located in the stack during the year. Of this number, 13,683 have been added to classes previously arranged, and 1,821 belong to classes newly classified in the course of the year.

Only a little advance from year to year in extending the classification is at present possible. The groups arranged last year were (1) the Dutch East Indies, a group appended to the history of the Netherlands, 245 volumes; (2) the Norton Collection, 571 volumes; and (3) the remaining divisions of Africa — namely, general works, Tropical Africa, and South Africa, 1,005 volumes.

The reclassification and renumbering of Swiss History, formerly included with German History, was made necessary by the reclassification of German History. The change was the more desirable because of the considerable additions to this subject which the Library has been receiving from Mr. W. Bayard Cutting, Jr. The reclassification of certain old text-books, withdrawn from the groups with which their subject matter connects them, and brought together in a text-book collection by themselves, was spoken of last year, but the count of volumes is included in this year's report, the books on Swiss History and the text-books together amounting to 977 volumes.

During the summer, Dr. Lichtenstein reclassified and renumbered the whole collection of French History. This renumbering, as explained in an earlier report, is made necessary by the character of the system employed many years ago, when the books were first classified. It was particularly desirable to carry it out at the present time, because we are just now adding extensively to the French History collection, and the new accessions should receive permanent numbers, rather than numbers which must soon be changed. The shelf-list for these books is now being written, but the shelf-marks on the cards in the catalogue have still to be changed. The number of volumes will, therefore, be reported in next year's statistics.

The department seems to have had its work better in hand than during any previous year. At the beginning of each month, the average number of volumes on hand has been 528, the corresponding number in 1905–06 having been 966, and in 1904–05, 1,374. This better showing is no doubt largely due to the fact that all the books relating to European History (3,239 in number) have been passed over to Dr. Lichtenstein, who is in charge of that subject.

Some improvement in the condition of the shelves has been attained by overhauling the more crowded classes, especially the Greek and Latin authors, and taking out the folio volumes, to be separately shelved. This has permitted a gain of an additional shelf here and there, which has made it possible, in some cases, to rearrange sets which we had recently been obliged to place in double rows on the shelves. The number of shelves containing double rows has thus been reduced from 700 to 645. In the course of the year, the contents of 13,791 shelves have been shifted, in order to find room for growth. This means that about 350,000 volumes have had to be moved, in order to find shelf room for the 14,000 volumes added. Nothing could tell more impressively the crowded condition at which our shelves have arrived. We have not, however, been obliged this year to add to the collections stored outside Gore Hall, and with the small amount of additional shelving contained in the basement of the new addition, we shall probably not have to remove anything during the year now beginning.

Mr. David Heald, who has been connected with the shelf department for two or three years, was transferred, December 1, 1906, to the library of the Medical School, to superintend the installation and reorganization of the several libraries of the School in their new quarters. He accomplished the task successfully, and returned to the Library service on September 1.

The number of volumes reported missing at the annual examination this summer was unusually large. Eighty-nine volumes were missing from the shelves of the reading-room and the open shelves of the delivery-room, and 175 volumes from the book-stack. This is a good deal more than twice the number reported in any of the last six years, and has never been exceeded since a record of losses has been kept. Forty volumes missing in previous years have been found, the total net loss of the last twenty-four years being 1,219 volumes. A careful examination of the list of missing books gives no clue to the cause of the increase this year. The fact that the loss is so much larger from the stack than from the open shelves in the reading-room would indicate that a considerable part of it is due to carelessness on the part of officers and students admitted to the stack, in not charging books borrowed.

CATALOGUE DEPARTMENT.

Mr. Currier, in charge of the catalogue department, presents the following figures in regard to the work of this department.

Catalogue Work.	1902–03.	1903–04.	1904–05.	1905–06.	1906–07.
Titles catalogued for College Library:					
Full and complete work	8,517	8,842	7,401	7,860	8,523
Continuations, analytical entries, etc.	4,450	5,573	6,319	5,960	6,634
Incomplete work	3,373	6,301	10,442	6,295	6,454
Total	16,340	20,716	24,162	20,115	21,611
Titles for Dept. and Special Libraries	3,846	4,121	3,562	4,867	4,422
Total titles catalogued	20,186	24,837	27,724	24,982	26,033
Cards added to Catalogue:					
Printed cards —					
College Printing Office	18,135	11,827	6,026	7,243	6,270
Library of Congress	5,440	7,011	7,981	8,558	9,216
A. L. A. Publishing Board	4,076	5,916	3,460	2,457	3,195
Total	27,651	24,754	17,467	18,258	18,681
Written cards	6,728	15,570	23,211	22,168	22,766
Total	34,379	40,324	40,678	40,426	41,447

A slight increase is to be noticed in each of the three counts of titles catalogued for the College Library, making a total increase of 1,496 titles. The greatest addition is in the number of titles catalogued in full and completely. The decline in the number of cards printed for us, and the increase in the number of written cards, is to be regretted. The fact that we are now sending our printed titles to two other libraries — to the Library of Princeton University and to the Library of Congress — makes it desirable to increase, rather than to cut down, the proportion of printed work. For several years, we have sent one card to the Library of Congress for each title printed here, and have received from that Library, in exchange, the galley strips of the printed cards it issues. Since February, 1907, we have sent to Princeton, at the request of the Princeton Library, four cards for each title printed for us. In both cases, the stock used is furnished by the library receiving the cards.

The "incomplete" work recorded is of two kinds, a part entered on the official catalogue only, and a part entered also, in somewhat summary fashion, on the public catalogue. For many years, when it has been necessary to abbreviate our work in any way, in order to keep up with increased accessions, the practice has been to enter on the official catalogue only anything which could not be catalogued in full. The result is that large numbers of German dissertations, current pamphlets, and certain large collections, such as the Riant library and parts of the Von Maurer library, are now recorded only on the official catalogue, where they are found, to be sure, by employees of the Library, but are apt to escape the notice of officers and students who are in the habit of depending on the public catalogue. The amount of work done in this way having increased so much during the last few years, the inconvenience of having no record of such titles on the public catalogue has been more and more keenly felt, and in work lately undertaken we have therefore tried to add to the entry on the official catalogue a simple, but in most cases probably a sufficient, entry on the public catalogue, repeating the title under subject as well as author, when this could be done without any prolonged examination. The cards used for this work have a red edge, so that they can be easily picked out at some future time; but it is probable that when revised, many of these cards will be found to need but little change or correction.

Mr. Currier reports two recent experiments on the cost of doing this "temporary" cataloguing. "The first experiment found the cost to be about 15 cents per title and the second just 13 cents. In the first experiment the cost was increased by the revision which the work was given. This revision has now been reduced to its lowest terms. In this work, the titles are given all proper references and some degree — frequently complete — of subject classification. Bibliographical investigations and analytical work are largely dispensed with."

Apart from current work, about 75,000 titles have now accumulated, either not entered on our catalogues or entered in such a way that revision is either necessary or desirable. Of this number, about 10,000 titles are catalogued by the "temporary" method described above. Some 46,000 titles have been entered on the official catalogue only. It is estimated that perhaps 10,000 titles are included in pamphlet boxes and in pamphlet volumes bound up many years ago without passing through the cataloguers' hands. In the special collections of Slovak and Judeo-German literature, there are perhaps 4,000 uncatalogued titles. The analytical work, which would have been desirable, but which we have been forced to pass over, now amounts to perhaps 6,000 titles. A part of the work included in this rather discouraging summary of arrears is not pressing, but probably more than half constantly gives rise to some degree of difficulty or uncertainty in determining with accuracy what is actually in the Library.

The new section of catalogue case added in the delivery-room occasioned an extension of the card catalogue. From a measurement of the cards made in connection with this work, it is estimated that the number of cards in the public catalogue is, on the author side, 668,000; on the subject side, 600,000; total, 1,268,000.

Mr. Currier reports the printing of a seventh supplement to the Index to the Subject Catalogue, and he adds: —

"The time is approaching when the Subject Index should be reprinted. But few copies are left, and the supplementary entries on interleaved pages make the volumes difficult to use. From now until this work is taken up, opportunities should be grasped for improving the catalogue. Frequently smaller topics can be straightened out without much difficulty, even though far-reaching changes cannot be undertaken. A regrouping of the sociological sections would be most useful, Mathematics should be overhauled somewhat, and Politics and Legislation should be thoroughly revised. The long-talked-of rearrangement of cards under History would be of great use. The present chronological arrangement, under places, serves but poorly the needs of the public, and for it should be substituted an arrangement by periods.

"During the past year, we have been able to make several minor revisions, in the headings Forestry, Almanacs, International Exhibitions, Finance of Cities, Christian Science, Theosophy, Dutch East Indies, etc."

The experiment begun about twenty years ago with a new form of catalogue, which it was thought might prove more convenient than the card catalogue, has at length been discontinued, its fate having been considered and re-considered many times during the last few years. This is what we have called the Leyden Catalogue, since it is modelled after a form of catalogue used at the University of Leyden. It consists of slips, larger in size than the ordinary catalogue card, bound together at the right-hand end into little volumes by a device which permits additional slips to be inserted at any point. Mr. Winsor hoped that these volumes might be found to be a better solution of the catalogue question than the card catalogue; but in practice, the fact that it cannot easily be managed with one hand, leaving the other hand free to use a pencil, seems to have been the chief element in making it unpopular, and for many years it has been of little real service to us. For some years after it was started, when the Library printed the greater part of its titles, it was practically complete for all recent accessions; but now that so many titles are received from the Library of Congress, and that the Library itself prints a smaller proportion of the titles catalogued here, it has become less and less complete, and is therefore used with less confidence. It will be quite possible in the future, if we should need to duplicate any part of our catalogue, to cut these slips down to the ordinary catalogue size, and we are retaining them with this in mind; but we have removed the set of volumes from the Reading-room and shall not try any longer to keep them up to date.

ORDERING DEPARTMENT AND FINANCIAL CONDITION.

The following table shows the income of our book funds, receipts from other sources for the purchase of books, and expenditure for books during the last six years.

Income and Expenditure.	1901–02.	1902–03.	1903–04.	1904–05.	1905–06.	1906–07.
From book funds, —						
Balance from previous year .	$4,534	$4,036	$3,208	$4,074	$4,781	$4,520
Income of the year	19,972	19,446	19,992	19,560	19,063	*20,899
Total available	24,506	23,482	23,200	23,634	23,844	25,419
Spent for books	20,470	20,274	19,126	18,853	19,324	19,451
Balance to next year	4,036	3,208	4,074	4,781	4,520	5,968
Special gifts, sales, etc. —						
Balance from previous year .	1,932	2,276	1,835	1,707	2,814	4,279
Received during the year . .	3,411	4,457	4,406	4,611	9,484	10,765
Total available	5,343	6,733	6,241	6,318	12,298	15,044
Spent for books	3,067	4,898	4,534	3,504	8,019	10,764
Balance to next year	2,276	1,835	1,707	2,814	4,279	4,280
Total spent for books, —						
College Library	$23,537	$25,172	$23,660	$22,357	$27,343	$30,215
Department Libraries (books ordered through Coll. Lib.)	7,245	7,389	6,214	5,623	9,357	7,642
Total	$30,782	$32,561	$29,874	$27,980	$36,700	$37,857

At the beginning of the year, the Council anticipated a serious reduction in the amount of money available for books, and accordingly made its appropriations on a much smaller scale than usual, — on a basis of there being only $7,000 free for new orders, instead of

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* Includes $620 accumulated income of the Boott Fund not previously reported.

$9,000, as in the previous year, or $11,000 two years before.* This reduction seemed necessary both because an unusually large number of unpaid bills had been carried over from the end of the previous year to the beginning of this (not shown by the Treasurer's balance in the above table) and because it was expected that the Corporation would be obliged to transfer to administration at least a thousand dollars from income ordinarily devoted to books. In fact, the expected transfer did not take place on the Treasurer's books, and the rate of interest on investments increased, so that the figures in the table show an increase. Expenditure, however, was curtailed in accordance with the Council's appropriations, and the balance carried over is correspondingly larger. This balance, moreover, is almost entirely available, there having been but few unpaid bills on hand at the beginning of the year.

The work of the ordering department, in charge of Mr. Potter, is summed up in the following table, which gives the figures of the last two years and the averages of three previous five-year periods.

WORK OF ORDERING DEPARTMENT.	1890–95. Average.	1895–1900. Average.	1900–05. Average.	1905–06.	1906–07.
New orders, —					
Total received and examined	5,132	7,327	12,275	9,773	9,046
Already owned or ordered	1,193	1,725	4,142	2,468	3,445
Forwarded	3,800	5,036	7,796	7,038	6,454
Estimate of cost, —					
For the College Library	$9,079	$10,145	$14,903	$12,642	$16,732
For Departments	2,902	3,223	3,710	5,092	4,168
Total estimated cost	11,981	13,368	18,614	17,734	20,900
Shipments received from abroad	28	33	68	64	51
†No. of vols. bought for College Lib.	4,416	5,736	7,538	11,012	7,520
‡Total gifts examined and passed on	16,050	16,455	21,582	17,754	18,980

In comparing these figures with those of the previous year, it will be noticed that, while the number of new orders received is considerably less (due to the general decrease in the amount of the appropriations), the estimate of cost is very much larger. This is due, on the one hand, to the fact that an accumulation of about one thousand titles, handed in last year, were looked up and forwarded this year; and on the other hand, to the exceptionally large amount of gift money to be expended, which was used in large degree for expensive works, thus increasing the average cost of orders sent forward. Of the $16,732 estimated, $7,051 was on Library funds, and $9,681 was charged to various special gifts. The number of volumes bought for the College Library is much nearer the usual average, last year's figure being very much increased by Dr. Lichtenstein's purchases in Europe.

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* Periodicals, outstanding orders, continuations, etc., are separately estimated.

† Excluding volumes formed by binding periodicals and pamphlets, but including volumes received on exchange account from other libraries.

‡ Including both volumes and pamphlets. See p. 199.

In regard to duplicates obtained unintentionally, Mr. Potter reports: "Forty-one unintentional duplicates were bought at a cost of $149.50. This is more than the year before, when the records (perhaps incomplete) showed only 34; but it is less than in 1904–05, when 56 were bought. The percentage of duplicates to the number of orders looked up was .0045. Unfortunately, several of these duplicates were rather expensive sets and the total cost was more than in any recent year. About half of them were practically unavoidable. Several are traceable to the various methods of "short cataloguing," which leave many pit-falls for the unwary searcher. During the year, we disposed of a large number of duplicates, some sold for us by the Coöperative Society, some sent to other libraries on exchange, and others given to the University of Tennessee and to one or two other college libraries."

Mr. Potter calls attention again to the need of employing more assistance on the Library accounts. His complaint is well grounded, and I expect that, with some re-arrangement of duties among the staff during the coming year, it will be possible to employ one person as an accountant, whose chief work it shall be to attend to the accounts and forward bills promptly for payment. Mr. Potter speaks of the subject as follows: —

"In my report of last year, I spoke of the unsatisfactory condition of the Library accounts, — the long delays in the payment of bills and the difficulty in securing frequent balances for use in assigning funds to new books. I regret to report that there has been no improvement in these matters this year. The one regular assistant, with more than half of her time needed for work in other departments, could not begin to do all the work on the accounts, and the help that I was able to assign to her from other members of the department was not sufficient either in quantity or quality to secure accuracy and promptness. Not only were the payments and balances constantly behind during the year, but at the end of the year it was found that there were numerous errors in the figures and several weeks of valuable time were wasted in locating and correcting them. Book-keeping is not work that can be done in odd moments by a person subject to constant interruptions and calls to other duties. It is true that seventeen years ago, when I first entered the Library, I found no difficulty in keeping these accounts as part of my other work and giving to them not more than five or six hours a week. But conditions have changed since them. It is not so much that the total expenditure has increased, being about double what it was then, but that the accounts have grown much more complex. Then there were 47 different accounts, divided as follows: Funds, 25; Gifts, 5; and Departments, 17. Now we have 39 Fund accounts; 57 Gift accounts; and 57 Department accounts, — a total of 153. The number of requisitions drawn last year was 465 against 309 seventeen years ago. These last figures do not properly represent the increase in work, as, with the delay in payments, many small bills are combined on one requisition. It would, I think, be a real economy for the Library to employ a trained book-keeper to attend to these accounts. Of course, if this were done, such a person would naturally have charge not only of the book accounts, but of the petty cash account (fines, etc.), of the pay-roll, and perhaps of the various statistics now kept by the different departments. I strongly recommend this matter for consideration."

STAFF.

There have been more than the usual number of changes in the staff during the past year. These changes usually diminish efficiency, at least for the time being, but they are unavoidable and, to some degree, in the long run beneficial. For, when it is seen that service in this Library opens the way to a better position in some other library, the attractiveness of the Library service is increased, and it is the easier to secure as our assistants young men and women of ability. Mr. C. A. Read, of the Class of 1902, who, with the exception of a few months at the Arnold Arboretum, had been in the employ of the Library continuously since his graduation, left us on the first of March, 1907, to become librarian of the University of Cincinnati.

Dr. Lichtenstein's appointment as Assistant in charge of European History was mentioned in my last report. His duties were to be somewhat different from those of any other assistant in the Library, since he was to give his services alike to the ordering department, the shelf department, and the catalogue department, in respect to the books relating to the subject under his charge. This new method of work gives fair promise, I think, of being successful in the end, but its trial so far has been somewhat incomplete. During the early part of the year, Dr. Lichtenstein's time was taken up with completing the work on the Hohenzollern Collection, on which he had previously been engaged. It was not until the first of November that he began regular work on the plan outlined. In the spring, his time was necessarily broken up by private work connected with preparing himself for examinations for the degree of Ph. D., and on the first of June, he began work on the re-classification of French History, which soon absorbed all his time for the remainder of the year.

He reports that only 193 orders were given him to look up for the Order Department, of which number 71 proved duplicate. On the other hand, he examined a large number of booksellers' catalogues, checking titles for the Hohenzollern Collection and for French History. In the course of this task, he marked and looked up over 800 titles, and sent forward as orders, 307. Mr. Potter reports that it was of advantage to turn the work over to him when any considerable number of orders were to be looked up at once, but that orders coming in in small numbers were more conveniently handled by his usual assistants. It should be noted also that with reduced appropriations, the money available for purchases, except in French History, was exhausted early in the year.

Dr. Lichtenstein reports that 3,380 volumes, dealing with subjects of European History, were turned over to him by the Shelf Department in the eight months under review, and that all except 141 were classified and sent along before the end of the statistical year. In addition to the 3,239 thus classified, 306 volumes came up for reclassification, not counting the work done on the general collection of French History. It was in this department that Dr. Lichtenstein's work was most complete and effective.

In regard to the practical advantage of the attempt to combine cataloguing with the other processes, Mr. Currier reports as follows: —

"The result of the year's experience shows that it is more difficult to turn over a given class of books to a single person for independent treatment in cataloguing than seems to be the case in the shelf arrangement. On the shelves, each collection forms a physical entity, and variation of method in any one group usually makes little or no confusion. In the card catalogue, however, there is a much greater interdependence of parts and, in consequence, greater uniformity is necessary. Customs as to choice of author heading, proper references, etc., must be adhered to more rigidly, and the system of classification of new titles must coincide with the old, so that all material on a given topic shall be grouped in one place. It would not, indeed, be difficult for a specialist staying permanently in the Library to learn the rules of entry. Variations in methods of preparing the title after the heading has been decided upon would make less trouble, though even here a certain degree of uniformity is desirable. As regards the subject catalogue, a specialist might work with a great degree of independence, but not unless a thorough revision of the old titles goes hand in hand with the classification of the new. In other words, the specialist should work out and carry into execution a system of classification for both old and new books, just as has been done in the shelf arrangement. At the present time, there could hardly be a better piece of work undertaken than a working over of the titles in European history, — e. g., a consolidation of cards now under History, Politics, Legislation, a substitution of an arrangement into periods for the present chronological series of the cards under various countries in the heading History, with other changes that might seem advisable. It would seem best for the work of preparing catalogue cards for new books to remain at present in the hands of the regular cataloguers, though Dr. Lichtenstein's special knowledge should be constantly made use of and he might well give the titles a hasty final revision."

Mr. Tillinghast reports as follows as the result of his experience with this method of work: —

"After trying for some time the plan of cataloguing and 'setting up' certain groups, I find that this method is much more interesting than the old, and gives a much better knowledge of the whole field of the subjects. Acquaintance with the catalogue helps in shelf-listing, and acquaintance with the books on the shelves and their arrangement helps in subject classification for the catalogue, and often in cataloguing. On the other hand, there is a danger of superficial and hasty judgments which the greater experience gained through work confined to cataloguing or shelf-listing is a guard against. Just how much time is saved, I cannot estimate. I fear it is not so much as might be expected. I fear that I sometimes hesitate on questions of entering or cataloguing which would be perfectly plain to those who have had long experience in those branches of work.

"I believe that all titles should be inspected by the head of the Catalogue Department."

It is only natural that effective coöperation should be more difficult to obtain in the case of the catalogue than in any other department of library work, since the catalogue, especially the author catalogue, has to be considered as a unit, and variations of practice are confusing and may be misleading. I believe, however, that, with longer experience, the specialist who is well acquainted with his subject, and is willing to take pains to familiarize himself with the details of the catalogue, may give most valuable assistance in preparing books for cataloguing by indicating briefly the work to be done. The actual writing out of cards, or of copying for the printer, may well be left to another hand. I expect to be able, in the course of the year, to extend this method of work one step further, by allowing one other member of the staff to carry books forward from the process of shelf-listing through the process of cataloguing.

WILLIAM COOLIDGE LANE,
Librarian.

THE GRAY HERBARIUM.

To the President of the University: —

Sir, — During the past academic year the regular staff of the Gray Herbarium has consisted of a curator (professor), an assistant professor engaged in monographic work, field exploration, and instruction, a collector, a librarian, an assistant engaged chiefly in determinative work, a library assistant, and an assistant engaged in the preparation and mounting of the specimens. Furthermore, the expert services of the following persons have been employed during portions of the year in connection with the activities of the Herbarium: President E. Brainerd of Middlebury College (on the genus *Viola*), Professor A. S. Hitchcock of the United States Department of Agriculture (on the *Gramineae*), Mr. Oakes Ames (whose valued services on the *Orchidaceae* have been gratuitously rendered), Mr. A. A. Eaton of the Ames Botanical Laboratory (on the genera *Equisetum* and *Isoëtes*), Mr. W. W. Eggleston (on the genus *Crataegus*), and Mr. F. Schuyler Mathews (as artist).

Among the sets of plants received during the year the following have from their extent or rarity been noteworthy: — By gift or exchange: from Mr. J. H. Maiden, Government Botanist of New South Wales, 200 plants of Australia; from Messrs. J. E. Thayer and Outram Bangs, 138 plants of Guadalupe Island (off the coast of Lower California), a locality of exceptional conditions and peculiarly interesting vegetation; from Dr. C. O. Rosendahl, of the University of Minnesota, 366 plants of Minnesota; from Professor E. O. Wooton, 526 plants of New Mexico, collected by Mr. O. B. Metcalfe; from Mr. T. S. Brandegee, of the University of California, 310 plants of Mexico; through Professor W. G. Farlow, 107 pteridophytes from the herbarium of the late Isaac Holden; from Professor J. W. Harshberger, of the University of Pennsylvania, 145 plants of Bermuda; from the Herbarium of Oxford University, 126 plants of Great Britain; from Mr. O. von Seemen of Berlin, specialist on the *Salicaceae*, a series of 218 specimens of the difficult genus *Salix*, including many critically studied hybrids; from Mr. C. Belhatte, of Paris, 115 plants of Europe; from the United States National Museum, through Dr. J. N. Rose, 958 plants of Mexico, including several collections of special value; from the New York Botanical Garden, through Professor N. L. Britton, 203 plants of the Philippine

Islands, 44 plants of Barbados, 144 plants of Bermuda, and 42 plants of the Bahama Islands; from the New England Botanical Club, 636 plants from the herbarium of the late Charlotte N. S. Horner; and from Professor James Fowler, of Queen's University, 210 plants of Canada, chiefly from the region of the Lower St. Lawrence. By purchase: from Mr. H. von Türckheim, 102 plants of Guatemala; the Gramina Hungarica, fascicles 1–6, including 305 specimens of Hungarian grasses, prepared and identified with special care; through Professor C. S. Sargent, 383 herbaceous plants of Bolivia and Paraguay, collected by Mr. K. Fiebrig, and 2018 herbaceous plants of Paraguay, collected by Mr. E. Hassler; from Mr. F. Raine, 300 plants of southern France; from Mr. T. S. Brandegee, 500 plants of Vera Cruz, Mexico, collected by Mr. C. Purpus; from Mr. W. W. Eggleston, 102 specimens of the genus *Crataegus;* from Professor N. L. Britton, 637 duplicates from the herbarium of Père Duss, well representing the florulae of Guadeloupe (W. I.) and Martinique; from Sir William T. Thiselton-Dyer, 857 plants of Colombia from the herbarium of Lehmann; from Dr. Edward Palmer, 484 plants of northern Mexico; from Mr. A. A. Heller, 482 plants of California; from Mr. W. H. Blanchard, of Westminster, Vermont, 389 specimens of *Rubus*, a genus of which he has long made a special study; from Mr. C. H. Shaw, 513 plants of the Selkirks. Collected by the staff: by Mr. Pringle, 439 plants of Mexico; by Professor Fernald, 1459 plants of Gaspé Peninsula and 99 plants of Rhode Island and Connecticut.

The entire number of specimens received from all sources has been 16,656.

The number of mounted sheets added to the organized portion of the Herbarium has been 14,679.

Duplicates sent out in exchange this year have numbered 8,754.

In the last report mention was made of special progress in the development of the Herbarium Library rendered possible largely through a gift of $1,000 to secure some of the more important desiderata. During the past year an additional gift of $500 has been received from the same generous but anonymous donor for use in continuing these purchases, and again particular attention has been given toward the filling of lacunae in the library, among the works acquired the following being worthy of special mention: Dumont de Courset, Le botaniste cultivateur; Comolli, Flora Comense; Lindenia, Iconographie des Orchidées; and Jordan and Fourreau, Icones ad floram Europae, a three volume folio work with many finely colored illustrations.

The Library has also received from Mr. Howard Payson Arnold three rare and valuable books: Cavannilles, Descripcion de las plantas; Roxburgh, Plants of the coast of Coromandel; and Richard, Tentamen florae abyssinicae.

The number of volumes received from all sources during the year has been 576 and of pamphlets 558.

Mr. Pringle, Collector for the Herbarium, has made another journey to Mexico and, notwithstanding exceptionally unfavorable conditions of prolonged drought prevailing in portions of the regions visited, was able to obtain a considerable number of new or otherwise noteworthy plants.

Professor Fernald has continued with marked success his investigation of soil control in the distribution of plants especially in the alpine regions of New England and the maritime provinces of Canada. His noteworthy results, already reduced to statistical form, show conclusively an intimate relation hitherto unsuspected between the distribution of plants in their native state and the occurrence of certain chemical elements in the underlying rock strata.

A request on the part of several students for guidance in research work in this highly interesting field of investigation has led to the announcement of Botany 20*d*, an additional research course, in charge of Professor Fernald. Instruction in this course as well as in Botany 7 and 20*c* will be conducted at the Herbarium.

Under the supervision of Mr. W. S. Burke, Inspector of Grounds and Buildings, a new boiler has been installed to replace the worn and antiquated one which for many years has been used to heat the Herbarium as well as the adjacent laboratory and lecture room.

Work on the Card Index of new Genera, Species, and Varieties of American Plants has been continued with vigor during the year by Miss M. A. Day, Librarian of the Herbarium, with the assistance of Miss H. E. Day and Miss E. M. Vincent, 8,931 cards having been issued to subscribers. This work has been conducted with such care and economy of methods that the money returns have considerably more than repaid the outlay in printing and have even covered the clerical activities involved. The scientific usefulness of this enterprise is widely recognized and the skill with which it has been managed becomes more apparent at a time when a parallel enterprise, covering the new plants of the Old World, has been discontinued owing to financial difficulties.

In April, 1907, through the liberality of Mr. N. T. Kidder, a botanical collector was sent with a geological exploring expedition to the Aleutian Islands, the condition being made by Mr. Kidder that the plants secured on the expedition should be sent to the Gray Herbarium. The collection thus received came to hand after the close of the academic year and comment upon it must be deferred.

Again it is my privilege to report a high degree of efficiency and devotion on the part of the Visiting Committee, through whose efforts the needs of the Herbarium have been brought to the attention of many patrons. The ready contributions of persons thus interested, supplemented by liberal gifts from members of the Committee, have enabled the Herbarium again to complete its financial year free from deficit. This is especially gratifying from the fact that it enables the Herbarium to approach a larger income in no way handicapped by debt.

In a former report mention was made of the liberal bequest of Mrs. W. B. Potter for the further endowment of the Herbarium. Mrs. Potter's estate has now been settled, her specific bequest having been paid in June, the residual portions of her legacy, together with accumulated interest, during the autumn. A part of the payment has been in transferred securities, the value of which is to some extent dependent upon a fluctuating market. It may be said, however, that the cash and securities thus transferred to the President and Fellows have been estimated at $195,798.02. According to the provisions of the will the property thus received will be known as the Sarah E. Potter Endowment Fund and its income devoted to the support of the Gray Herbarium.

It would be impossible to overstate the significance of this gift to the Herbarium or adequately express the gratitude of the staff and friends of the establishment. At the time of Dr. Gray's death in 1888 the Gray Herbarium had already reached, through his untiring efforts and high professional distinction, a degree of scientific importance, which made it imperative that the development and services of the establishment should be maintained in a manner which its small endowment of $18,500 could of itself in no wise render possible. Thus for nearly twenty years the Herbarium has been in great part dependent upon gifts for present use. These have been received, largely through the activity of the Visiting Committee, with gratifying regularity and in amount sufficient to maintain the continuous growth of the collections and library as well as to render possible the determinative work, monographic researches, and publications of the staff.

Vigorous and unremitted effort has also been made by friends to secure for the Herbarium an adequate endowment. This aid, in which Mrs. Potter took no small part, culminated in securing the Asa Gray Professorship Fund, the Asa Gray Memorial Fund, and the Robert Charles Billings Fund. These funds, together with the much larger Sarah E. Potter Fund just received, will yield an income which (supplemented by other sources of revenue such as copyrights, sale of publications, etc.) will maintain the Herbarium at its present grade of expenditure and permit a moderate enlargement of the activities of the establishment. It is to be pointed out, however, that the added income from increased investments does not so greatly exceed the resources heretofore available through generous gifts for present use as to permit any sudden change of policy, augmentation of the staff, or other considerable increase of expenditure. The beneficial effect is rather in giving the Herbarium what is of even higher importance, namely, an *assured* income, since most scientific enterprises, such as explorations, monographic publications, revision of text-books, and the like, have to be planned far in advance, and can scarcely be undertaken unless the available resources can be calculated some years ahead.

Although the additional endowment will relieve the Herbarium from its most pressing needs, it is hoped that such contributions as have been made with some regularity for present use during the last few years may, so far as possible, be continued, for upon such gifts must depend, to a great extent, any possibility of special acquisitions for the collections and library. It is believed that the incentive to such gifts will not be less from the circumstance that in future they may not be so pressingly needed for the running expenses of the establishment but may be, in each instance, employed specifically to increase in some particular regard the acquisitions of the Herbarium or to augment the scientific undertakings and published output of the staff, — to accomplish, in other words, ends which would but for them have been unattainable. In this connection it should be borne in mind that the Gray Herbarium belongs to a class of estabments elsewhere largely supported by governmental or municipal aid and therefore able to maintain a larger staff and incur much greater expenditure. For this reason, if the Gray Herbarium is to maintain its high rank among allied establishments, it must be supported by a gradually increasing income.

The particular need of the Herbarium at present, a new building, has been duly emphasized in former reports. Here it may be said merely that such need, after another year's growth, is even more pressing. It is hoped, also, that the substantial addition to the endowment of the Herbarium, by putting the establishment upon a footing of permanence, may be a new incentive to gifts for the much needed building.

During the year the staff of the Herbarium has published 27 scientific papers, which have been so completely recorded in the Harvard University Gazette as to need no further mention here.

B. L. ROBINSON, *Curator*.

THE BOTANIC GARDEN.

To the President of the University: —

Sir, — I have the honor of presenting, as Director of the Botanic Garden, the following report for the year 1906–07.

As matter of record, Mr. Robert Cameron, Head Gardener, has prepared a short account of the weather at the Garden during the year which has just closed: —

> "The weather in winter was very cold, registering frequently from six to ten degrees below Fahrenheit's zero. This severe cold demanded a great increase in the amount of coal required to keep the temperature of our greenhouses within safe limits. Fortunately the ground was well covered with a thick coating of snow, and hence our herbaceous plants in the open plots wintered well. The spring was cold and late, but the spring-flowering plants blossomed unusually well, and their flowers lasted for a long time, owing to the cool moist weather. The summer was hot and remarkably dry, and for several weeks we had no rain, but our improved water-supply enabled us to keep the plants in good condition. An unusual amount of the time was spent in the winter in 'creosoting' and destroying the eggs of the gypsy moth and the nests of the brown-tail moths. The lateness of the spring prevented our spraying with disparene until nearly the end of May. This spraying consumes much time and involves large expense, but it is the only effective measure known to us by which we can destroy injurious leaf-eating insects. By thorough spraying we were able to meet successfully even the elm-leaf beetle, although the leaves of elm trees near the Garden were completely destroyed."

In pursuance of the policy of making the Garden attractive to all students of the University many new species and varieties of bulbous plants have been added to our collection, and it is expected that these will prove to be of much interest in the coming spring. Mr. Cameron, who is on duty at the Garden all the time, reports that the numbers of visitors are increasing year by year, but that it is in spring and early summer that the largest numbers come. At that time the Garden serves as a park for our students and for the general public, and in this way gives great pleasure to our community. Our earnest attempts to render the Garden attractive to all of our students and to the community in general do not interfere at all with its chief office as a source of supply of material for our botanical classes.

The Director must again call attention to the serious difficulty under which a northern garden labors in its attempt to meet the reasonable demands of University students. Our first term begins at about the time when the first frosts come in October, and our final class exercises are held in the last days of May when the out-of-door plants are just coming into bloom. In other words, one is obliged to provide material for class studies during the long cold season when but little open-air material is available. Forcing plants to bloom out of season is always an expensive matter, but under our present conditions we are obliged to collect a large number of wild plants in the autumn for early blooming under glass. Otherwise it would not be possible for us to bring any of the students in our very large elementary class into contact with our native flora. After the regular College course ends our Garden is in full bloom. In what way can we best use this great amount of summer material?

The summer courses in Botany are attended by comparatively few students; much larger classes could be supplied than now. Possibly by reconstructing the botanical courses in the summer their range could be safely extended and a wider choice offered to those College students who might wish to avail themselves of increased opportunities to employ wisely a part of a too long vacation.

During the past summer, the Botanic Garden placed at the service of those conducting the Nature Study course all material asked for. Every endeavor to utilize our abundant store of flowers for study in the summer will meet with the cordial coöperation of all members of the staff at our Botanic Garden.

Important additions have been made to all parts of the Botanical Museum during the past year. A large proportion of the specimens of economic products which had been injuriously affected by light have been replaced by fresh specimens, and this work of replacement is to be continued as occasion demands. In the great Botanical Museum in Calcutta the economic products are replaced nearly every year by fresh ones for exhibition and study, but our cases do not suffer so severely as the museums in the tropics from intense light or from so many museum pests. Practically all of our type-specimens are now in insect-proof containers. The economic product which attracted most attention this year is the striking exhibit of sugar-cane from our experimental station in Cuba. The specimens exhibited were the finest of several hundred varieties of artificial seedlings. The best is known as "Harvard 208." It has proved to be strong, resistant, and of high sugar content.

The Ware Collection of Glass-models of Plants in Flower has now been arranged in three rooms in such manner as to exhibit the different relations of plants. In the vestibule the specimens are distributed with reference to their surroundings, — soil, water, light, and the animal friends and foes. In the large room adjoining they have been placed in a linear series extending from Engler's highest class to the lowest of the flowering plants, showing by means of sections and enlarged parts the characteristics upon which systematists base their modern classification. A communicating room contains the principal economic plants, together with their products. This improvement in classification and the new mounting on plaster-plaques have drawn to the exhibition rooms even larger numbers of visitors than before, and on certain days it has become a matter of embarrassment to afford all the visitors an opportunity of examining the models. Our cases are too close together for the greatest convenience of visitors, but no change in this respect is at present possible. To remove the specimens to a special building, as has been contemplated, would seriously interfere with the original plan of Professor Louis Agassiz, namely, to bring under one roof specimens illustrating every branch of Natural History. He designed having plants as well as minerals and animals displayed in his Museum, and these glass models of plants carry out our part of that plan. To remove them now would cause a break in the continuity which cannot be regarded with favor.

In the section devoted to Fossil Plants little has been done during the year except to maintain the collection in good condition. Professor R. T. Jackson reports that one hundred and ninety good specimens of choice selected plants from the Cretaceous of Kansas have been purchased, comprising one hundred and five species and varieties. Dr. Jackson has given to this part of our Museum a great deal of time, and has rendered all parts of the great collection easily accessible.

The experiment station in Cuba is now succeeding beyond our expectations. The cane-seedlings are proving good in every way, and the last are the best. The generous manner in which Mr. Atkins has sustained the enterprise has enabled the management to undertake difficult experiments the results of which at one time seemed doubtful. But it is pleasant to report that Mr. Atkins expresses himself as completely satisfied with the undertaking. Our range of tropical and subtropical species in the grounds is being constantly widened. Very cordial relations are sustained with the British stations in the West Indies and with the government station at Santiago de las Vegas. This coming winter renewed attempts will be made to bring in the new Caoutchouc plants, and also to begin a study of certain new varieties of Cacao.

On account of the limited amount of space available in our greenhouses we were obliged in the spring to decline the generous offer, from a friend of the Garden, of a large collection of valuable orchids. If we had had at our disposal two hundred square feet more on our shelves we should have gladly accepted the gift. But this space could not be had without the erection of another greenhouse, and this, considering our scanty funds, was out of the question.

During the past year the Overseers' Committee on the Garden and Museum have again considered the advisability of attempting to increase our slender endowment fund. The financial condition of the country forbids us to press the matter at this time.

GEORGE LINCOLN GOODALE, *Director.*

THE ARNOLD ARBORETUM.

To the President of the University: —

Sir, — I have the honor to submit the following report on the progress and condition of the Arnold Arboretum during the year ending July 31, 1907.

The preparation of the ground (see report for 1905–06) for the type collection of hardy shrubs has been finished during the year and the collection has been planted as far as material for it has been available. In the new arrangement this collection occupies nineteen beds 10 feet wide, with a total length of 7765 feet, separated by grass paths 5 feet wide. The northern and eastern ends of the area filled by these beds are protected by a trellis 1280 feet long and 10 feet high, built with concrete posts and galvanized wire stringers and to be used for the cultivation of the collection of vines and other climbing plants. The ground available for the shrub collection is unfortunately too small for the display of representatives of all the hardiest and most distinct species, and it has been found necessary to plant genera like Syringa, Viburnum, Cornus, and several others in which some species are arborescent along the drives in different parts of the Arboretum. Among these excluded groups are some of the principal hardy genera of the Heath family, including Rhododendrons, Azaleas, and Kalmias; and for these genera additional ground has been prepared on the western slope of Bussey Hill, and at the base of Hemlock Hill where a large plantation of Rhododendrons has been made during the year. Ground has also been prepared round the borders of the North Meadow for a number of partly arborescent, partly shrubby, groups which were formerly cultivated in the general shrub collection.

On Peter's Hill 266 additional species or forms of North American Crataegus have been permanently planted during the year. This collection is now represented by 716 groups of species, forms, and varieties.

The interchange of plants and seeds with other horticultural and botanical establishments has been continued during the year. 14,003 plants (including grafts and cuttings) and 732 packets of seeds have been distributed as follows: To the United States, 12,522 plants and 57 packets of seeds; to Canada, 21 packets of seeds; to the West

Indies, 8 packets of seeds; to Argentina, 5 packets of seeds; to Peru, 4 packets of seeds; to Chili, 101 packets of seeds; to Great Britain, 1,186 plants and 147 packets of seeds; to the continent of Europe, 295 plants and 272 packets of seeds; to Japan, 69 packets of seeds; to China, 3 packets of seeds; to Java and the Straits Settlements, 3 packets of seeds; to Australia, 4 packets of seeds; to New Zealand, 6 packets of seeds; to the Hawaiian Islands, 13 packets of seeds; to Cape Colony, 17 packets of seeds. There have been received during the year 3,325 plants and 476 packets of seeds; of these, 3,067 plants came from the United States, 75 from England, 31 from France, 2 from Holland, and 150 from Russia.

During the year 7,823 sheets of dried plants have been added to the herbarium; of these, 6,392 have been purchased and 1,433 have been presented to the arboretum. The most important of the purchased collections is a selection of 3,540 sheets from the herbarium made by Mr. Alfred Rehder during his travels in Europe and North America and rich in rare and critical woody species cultivated in European botanic gardens. Other important collections added to the herbarium during the year are from the United States, Mexico, Jamaica, Chili, Paraguay, the Philippine Islands, the Malay Peninsula, Sweden, northern Russia, the Caucasus, and Portugal.

During the year the Arboretum has received by gift 1,508 bound volumes and 247 pamphlets.

To supplement a gift of $5,000 made a few years ago by the late Francis Skinner, for the purchase of rare and expensive books for the library, his son, Mr. Francis Skinner, of Dedham, has given to the Arboretum a similar sum, with the suggestion that the books purchased with this money be considered a memorial to his father's interest in the Arboretum and its work.

During the year instruction in dendrology has been given at the Arboretum, by Mr. Jack, to students of landscape-gardening from the Institute of Technology and to University students in forestry.

A few friends of the Arboretum living in Massachusetts and in Europe have made it possible to begin during the year the systematic study of the trees and shrubs of central and western China. This mountain region, with a climate similar to but more severe than that of the southern Appalachian region of North America, is known to be rich in valuable and interesting plants; and as it is the only part of the world remaining botanically unexplored of which the trees may be expected to flourish in our northern states, results of the highest scientific and practical value may be expected from its careful examination and by the introduction of its plants into American and

European gardens and plantations. For this difficult exploration the Arboretum has secured for two years and a half the services of Mr. E. H. Wilson, an Englishman who has had five years' experience in western China in collecting plants for an English commercial firm. Mr. Wilson, having passed some time at the Arboretum during the autumn, sailed for China early in January and established his permanent base of operations at Ichang at the foot of the great gorge of the Yang-tse-kiang. During 1907 he has been occupied in collecting on the high mountains of Hupeh, and early in 1908 is to proceed by way of the Yang-tse-kiang to the western borders of Szech'uan to explore the great forests of conifers which cover the mountain ranges separating China from Thibet.

To extend the field of operations in China an arrangement has been made with the Department of Agriculture of the United States under which an experienced collector of the Department in China has been detailed to explore, without expense to the Arboretum and under Mr. Wilson's general direction, the forests surrounding the temples on the little known Mt. Wut'ai, one of the sacred mountains of China, situated in the northern province of Shansi.

The seeds of a large number of plants entirely new to cultivation have already been received from Mr. Wilson, and there is now every reason to hope that his mission will be successful, and that this new enterprise will be one of the most useful and interesting pieces of work undertaken at the Arboretum.

Mr. Alfred Rehder returned to the Arboretum from Europe in November and has since been engaged here on the Bradley Bibliography. Mr. Shaw is still working on his monograph of the genus Pinus.

I take this opportunity to express again my thanks to the Trustees of the Massachusetts Society for the Promotion of Agriculture for their annual grant for the maintenance of the Arboretum, and to the members of the Visiting Committee for their interest and assistance.

C. S. SARGENT, *Director*.

THE CHEMICAL LABORATORY.

To the President of the University: —

Sir, — Professor Richards, although on leave of absence for the year, continued to give during the first half-year his lectures on physical chemistry (Chemistry 6). In March he went to Germany and served as exchange professor at the University of Berlin during the summer semester, lecturing on the exact determination of physico-chemical constants and conducting a number of investigations in the laboratory of the First Chemical Institute of the University. During Professor Richards' absence Chemistry 6 was conducted by Mr. H. L. Frevert (A.B. 1905) and Chemistry 8 (Historical Development of Chemical Theory) by Professors Torrey and Baxter. Mr. Frevert also gave the half-course in electro-chemistry (Chemistry 7), while the laboratory course in this subject (Chemistry 13) was omitted. No changes were made in the other regular courses offered by the Division during the year 1905–06.

The number of elections in the several laboratory courses during the year and in June, 1906, were as follows: —

	October, 1906.	January 1, 1907.	June 1, 1907.	June 1, 1906.	
Chemistry 1	318	330	300	309	
Chemistry 3	114	115	110	100	
Chemistry 4	37	43	39	29	
Chemistry 5*a* . . .	34	38	32	37	
Chemistry 6	14	15	13	25	
Chemistry 9	16	16	..	..	(14, Jan. 1, '06)
Chemistry 10	..	..	19	17	
Chemistry 12	8	10	..	..	(8, Jan. 1, '06)
Chemistry 13	..	..	x[1]	5	
Chemistry 20*a* . . .	x	x	x	2	
Chemistry 20*b* . . .	5	5	5	2	
Chemistry 20*c* . . .	6	6	6	8	
Chemistry 20*d* . . .	x	x	x	6	
Chemistry 20*e* . . .	1	2	1	1	
Chemistry 20*f* . . .	13	14	15	5	
	566	594	540	546	(+22=568)

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[1] x signifies that the course was not given.

The number of elections in the courses in which no laboratory work is given were as follows:—

	October, 1906.	Jan. 1, 1907.	June 1, 1907.	June 1, 1906.	
Chemistry 1 (for the lectures only)	2	5	2	xx[1]	
Chemistry 6 (for the lectures only)	1	2	2	xx	
Chemistry 12 (for the lectures only)	0	1	..	..	
Chemistry 2	102	102	..	..	(95, Jan. 1, '06)
Chemistry 5	84	89	84	89	
Chemistry 7	..	..	9	19	
Chemistry 8	..	..	60	73	
Chemistry 11	23	26	24	28	
Chemistry 14*a*	..	..	x	21	
Chemistry 15	..	..	42	20	
Chemistry 16	10	11	..	..	(10, Jan. 1, '06)
Chemistry 17	x	x	..	..	(17, Jan. 1, '06)
Chemistry 18	x	x	..	..	(9, Jan. 1, '06)
	172	186	173	199	(+131=330)
Total number of elections . . .	738	780	713	745	(+153=898)

The number of elections in laboratory courses during 1906–07 was 566, as against 568 in 1905–06, while the entire number was 853 in the last year and 898 in the year before. By deducting from the last figure the number of elections in courses 14*a*, 17, 18 (given during 1905–06 only) we obtain 851 for the total number of elections in 1905–06, which is more fairly comparable with former years.

The tabulation of the number of students completing laboratory and lecture courses is more accurate than the tabulations made at the beginning of the year or during the year. The table on the following page gives a comparison of the elections for the past twelve years. The figures for the elections are taken from the annual reports of the Dean of the Faculty of Arts and Sciences; for the total attendance, from the Annual Catalogues.

The percentage of laboratory elections out of the entire number of students in the Faculty of Arts and Sciences during the three years, 1902–05, was not more than the average percentage for the twelve years, and the percentage in 1905–06, though less than the average, was still greater than in 1903–04, in which year was the maximum number of students in the Faculty of Arts and Sciences.

While the number of laboratory elections in 1906–07 was 8 per cent. greater than in 1895–96, the percentage of elections was less, the number of courses having increased from 12 to 15. The lower percentage of laboratory elections may be ascribed to the diminution in the number of students taking prescribed programmes in the

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[1] xx signifies that this computation was not made prior to 1906–07.

Lawrence Scientific School; perhaps also to the additional charges for extra courses.

	1895–96.	1896–97.	1897–98.	1898–99.	1899–1900.	1900–01.	1901–02.	1902–03.	1903–04.	1904–05.	1905–06.	1906–07.	Aver.
Number in laboratory courses.	521	512	555	510	572	624	634	601	604	602	566	565	572
Number in all courses.	544	607	663	640	711	782	752	750	738	873	(896) 849	850	726
Attendance, Faculty Arts and Sciences	2396	2417	2516	2588	2723	2840	2844	3009	3023	2905	2797	2867	2744
Percent. completing laboratory courses.	21.7	21.2	22.1	19.7	21.0	22.0	22.3	20.0	20.0	20.7	20.2	19.7	20.9
Percent. completing all courses.	22.7	25.1	26.4	24.7	26.1	25.8	26.4	24.9	24.4	30.1	30.4	29.6	26.4
No. of Courses given: Laboratory.	12	12	12	12	13	13	13	14	15	15	15	15	13
All.	13	14	14	14	16	16	16	19	20	21	22 (25)	23	17
Elections per course: Laboratory.	43	43	46	43	44	48	49	43	40	40	38	38	43
All.	42	43	47	46	44	46	47	39	37	42	36	37	42

The number of lecture courses has increased from 1 in 1895–96 to 8 in 1906–07, and the percentage of all elections from 22.7 to 29.6. For some of these courses laboratory work would be provided if there was room available. From this and other evidence it is safe to say that the laboratory elections would show an increase if the laboratory accommodations were greater.

Chemistry *B* was discontinued in 1902–03, but the decrease in the number of laboratory elections for that year and ensuing years was not, on the whole, more than the average number in Chemistry *B* during the previous seven years.

The number of elections per course is smaller than in 1895–96, but the average has been practically the same for laboratory and for all courses. The variations from this average have not exceeded 16 per cent. and have been generally under 8 per cent.

The number of research courses has increased from 4 in 1895–96 to 6 in 1906–07, and the elections from 12 to 27. The laboratory accommodations for research students are now taxed to the limit.

No alterations affecting the working space in either Boylston or Dane Hall were made during the year. Attention has been called repeatedly in previous reports of the Directors to the crowded state of Boylston Hall and the unsanitary condition of some of the rooms in this building and in Dane Hall. While the alterations of previous years have improved some of the rooms, yet a majority of the students are hearing lectures and doing laboratory work in unsuitable quarters. No provision for much needed laboratory courses can be made on account of lack of space. Sufficient room for research students is more difficult to find each year, and the facilities for research, long inadequate, cannot be improved in the present building.

We continue to receive books and journals from Professor Wolcott Gibbs, and our collection of material for lectures in industrial chemistry has been increased by generous gifts from various manufacturers.

The following investigations were carried on by the staff of the Division during the year:—

Professor Jackson, with Dr. Latham Clarke, continued the study of curcumine and rosocyanine. With Mr. P. W. Carleton the study of derivatives of tetrachlororthoquinone was continued, including the quinhydrone and the heptachlorpyrocatechinhemiether. With Mr. H. A. Flint, work on the tetrabromorthoquinone was carried on, the first replacement of bromine by the methoxy group in these compounds being observed, and good progress made in determining the constitution of the oxidation product containing five atoms of carbon. Mr. R. W. Peakes prepared the mercuric salts of the three nitranilines. With Mr. J. E. Zanetti a new form of extractor was tested, and shown to be much more effective than that now in use. Much time was also spent in studying the action of bromine on dimethylaniline and in trying to make orthoquinones containing the nitro group.

Professor Richards began in April at Berlin the investigation of the composition of the chlorates, with the assistance of Dr. A. Staehler of Berlin and Dr. F. Kuzma of Prague. He began also the precise quantitative study of the composition of the halide salts of ammonium in order to obtain more definite knowledge concerning the atomic weight of nitrogen. In this work part was taken by Dr. P. Köthner, privatdozent in the University of Berlin; Dr. W. F. Hinrichsen of the Königliche Materialprüfungsamt; Dr. E. Groschuff and Dr. K. Hüttner, chemists of the Physikalisch-technische Reichsanstalt; Mr. E. Tiede and Mr. H. Kessler. Dr. F. Hoffmann, also of the last named institution, studied the transition temperature of sodic sulphate and strontic chloride with the intention of using these points in standard thermometry. Dr. F. Wrede carried on a similar investigation upon manganous chloride. The transition temperature of this salt was found to be 59.089° on the international hydrogen scale, and was shown to be capable of easy and exact reproduction.

Convenient apparatus was devised for carrying out the determination. A description of this latter investigation is in press, and the others will be continued in Berlin during the coming winter and, it is hoped, shortly finished. The expenses of all these investigations were met through the generosity of Geheimrat Emil Fischer and the German Government. Professor Richards has received a fifth grant of $2500 for research from the Carnegie Institution of Washington.

Professor Torrey continued with Mr. H. B. Kipper the study of ketone substitution derivatives of orthohydroxyketones, the special object being to extend the knowledge of alkali-insoluble phenols. With Mr. W. H. Hunter two isomeric silver salts of tribromphenol were discovered and investigated. With Mr. W. MacPherson some new azo dyes from paraamidoacetophenone were prepared and investigated, and with Mr. F. N. Patterson a similar series from paraamidobenzophenone. With Mr. C. M. Brewster the action of phthalic anhydride on resacetophenone and the reduction of the latter compound were studied. With Mr. W. A. Boughton a study was made of the velocities of saponification of certain esters derived from substituted phenols.

The following researches were carried on under the direction of Professor Baxter: Mr. F. B. Coffin commenced an investigation upon the atomic weight of arsenic by analysis of silver arsenate, while Mr. Grinnell Jones conducted a parallel research upon the atomic weight of phosphorus by analysis of silver phosphate. Mr. Edward Mueller continued the investigation upon the atomic weight of chromium, begun last year by Dr. M. A. Hines, through the analysis of silver chromate. The molecular weight of silver chromate, referred to silver as 107.93 and oxygen as 16.000, was found to be 331.92, whence the atomic weight of chromium is 52.06. If silver is taken as 107.88, chromium becomes 52.01. Mr. G. S. Tilley continued the analysis of iodine pentoxide, begun last year in order to refer the atomic weight of iodine directly to oxygen. Although final results have not yet been obtained, positive evidence has been secured that the ordinarily accepted value for iodine is considerably too high. Mr. H. H. Willard studied silver permanganate with reference to its use in determining the atomic weight of manganese. Mr. J. H. Wilson analyzed lead chloride and found the atomic weight of lead to be 207.19 if the atomic weight of silver is 107.93, and 207.09 if silver is 107.88. Mr. A. C. Boylston determined the specific and molecular refraction of the chlorides, bromides, and iodides of the alkalies in solution, while Mr. P. B. Goode studied the chlorides of the alkaline earths in the same way. Mr. H. W. Daudt investigated the carrying down of the oxalates of the alkalies and ammonium by oxalates of the rare earths, while Mr. R. H. Jesse, Jr., studied the oxalates of calcium, barium, nickel, and cadmium with reference to occlusion of oxalic acid and ammonium oxalate. Mr. F. N. Brink determined the specific gravities of the iodides of the alkalies and the alkaline earths. Mr. L. L. Burgess determined the refractive index of water at different temperatures, and examined the spectrum of the purest cadmium under different conditions. Mr. G. L. Kelley investigated the adsorption of silver nitrate by barium sulphate from solutions of various concentrations. Mr. H. C. Chapin studied the separation of the rare earths by fractional crystallization, with especial reference to the preparation of pure neodymium salts. Mr. L. G. Smith devised apparatus for measuring photographically optical activity for ultra violet light. Mr. H. H. Bartlett analyzed the ashes of certain plants. Professor Baxter received a fourth grant, of $1000, from the Carnegie Institution of Washington.

Dr. Henderson completed a research upon the relationship between position isomerism and heats of combustion in connection with the investigations of heats of combustion now being carried on in this laboratory. All his experimental investigations in biological chemistry have been pursued at the Medical School, there being no suitable space for the purpose in this laboratory.

Dr. Clarke, beside his work with Professor Jackson on the constitution of curcumine and rosocyanine, accomplished the synthesis of four new octanes. With Mr. P. R. Manahan he studied the preparation of certain other octanes, and attempted to apply the Grignard reaction to certain anthracene derivatives.

Professor Sanger studied with Mr. L. H. Whitney the preparation and properties of chlorsulphonic acid and pyrosulphuryl chloride, with especial reference to their separation from each other.

The following papers were published during the year: —

1. On the Action of Bromine on Dimethylaniline. Second Paper. By C. Loring Jackson and Latham Clarke. *Am. Chem. Journ.*, XXXVI, 409.

2. 1-3-5-triiod-2-chlorbenzene. By W. V. Green. *Am. Chem. Journ.*, XXXVI, 600.

3. On Certain Derivatives of Tetrachlororthobenzoquinone. By C. Loring Jackson and R. D. MacLaurin. *Am. Chem. Journ.*, XXXVII, 7.

4. On the Constitution of the α and β Addition Compounds of Alcohols and Tetrabromorthobenzoquinone. By C. Loring Jackson and R. D. MacLaurin. *Am. Chem. Journ.*, XXXVII, 87.

5. Some Derivatives of Tetrachlororthobenzoquinone. By C. Loring Jackson and R. D. MacLaurin. *Am. Chem. Journ.*, XXXVIII, 127.

6. The Determination of Small Amounts of Antimony by the Berzelius-Marsh Process. By **Charles R. Sanger** and **J. A. Gibson**. *Proc. Am. Acad.*, XLII, 719; *Journ. Soc. Chem. Ind.*, XXVI, 585; *Zeitschr. f. anorg. Chem.*, LV, 205.

7. Equipment for Teaching Chemistry in Boston High Schools. By **Charles R. Sanger**. *Ann. Rep. Schoolhouse Dep't of Boston*, Feb., 1906–Feb., 1907.

8. Energy Changes involved in the dilution of Zinc and Cadmium Amalgams. By **T. W. Richards** and **G. S. Forbes**. *Publ. Carnegie Inst. of Wash.*, No. 56, p. 1; *Zeitschr. f. phys. Chem.*, LVIII, 683.

9. The Electromotive Force of Iron under Varying Conditions, and the Effect of Occluded Hydrogen. By **T. W. Richards** and **G. E. Behr**, Jr. *Publ. Carnegie Inst. of Wash.*, No. 61, p. 1; *Zeitschr. f. phys. Chem.*, LVIII, 301.

10. Densities of Lithium, Sodium, Potassium, Rubidium, and Caesium. By **T. W. Richards** and **F. N. Brink**. *Journ. Am. Chem. Soc.*, XXIX, 117. 1907.

11. Concerning the Adiabatic Determination of the Heats of Combustion of Organic Substances, especially Sugar and Benzol. By **T. W. Richards**, **L. J. Henderson**, and **H. L. Frevert**. *Proc. Am. Acad.*, XLII, 573; *Zeitschr. phys. Chem.*, LIX, 532.

12. A Revision of the Atomic Weight of Potassium. The Analysis of Potassic Chloride. By **T. W. Richards** and **A. Staehler**. *Publ. Carnegie Inst. of Wash.*, No. 69, p. 7; *Ber. d. deutsch. chem. Gesell.*, XXXIX, 3611; *Journ. Am. Chem. Soc.*, XXIX, 623.

13. A Revision of the Atomic Weight of Potassium. The Analysis of Potassic Bromide. By **T. W. Richards** and **E. Mueller**. *Publ. Carnegie Inst. of Wash.*, No. 69, p. 27; *Zeitschr. f. anorg. Chem.*, LIII, 423; *Journ. Am. Chem. Soc.*, XXIX, 639.

14. The Quantitative Synthesis of Argentic Nitrate and the Atomic Weights of Nitrogen and Silver. By **T. W. Richards** and **G. S. Forbes**. *Publ. Carnegie Inst. of Wash.*, No. 69, p. 47; *Zeitschr. f. anorg. Chem.*, LV, 35; *Journ. Am. Chem. Soc.*, XXIX, 808.

15. The Molecular Weight of Argentic Sulphate and the Atomic Weight of Sulphur. By **T. W. Richards** and **G. Jones**. *Publ. Carnegie Inst. of Wash.*, No. 69, p. 69; *Zeitschr. f. anorg. Chem.*, LV, 72; *Journ. Am. Chem. Soc.*, XXIX, 826.

16. The Compressibility of Lithium, Sodium, Potassium, Rubidium, and Caesium. By **T. W. Richards**, **W. N. Stull**, and **F. Bonnet**, Jr. *Publ. Carnegie Inst. of Wash.*, No. 76, p. 9.

17. The Compressibility of Carbon, Silicon, Phosphorus, Sulphur, and Selenium. By **T. W. Richards**, **W. N. Stull**, and **F. N. Brink**. *Publ. Carnegie Inst. of Wash.*, No. 76, p. 29.

18. The Linear Compressibility of Copper and Iron, and the Cubic Compressibility of Mercury. By **T. W. Richards** and **F. N. Brink**. *Publ. Carnegie Inst. of Wash.*, No. 76, p. 44.

19. The Compressibilities of the More Important Solid Elements and their Periodic Relations. By T. W. **Richards** and W. N. **Stull**. *Publ. Carnegie Inst. of Wash.*, No. 76, p. 56.

Nos. 16, 17, 18, and 19 are to appear likewise in the *Zeitschrift für physikalische Chemie* and the *Journal of the American Chemical Society*. A brief summary of the work on compressibility is given in the *Chemiker Zeitung*, 1907, No. 41; also in the *Zeitschrift für Electrochemie*, XIII, 519.

20. The New Outlook in Chemistry. Inaugural Lecture in Berlin, May 4, 1907. By T. W. **Richards**. *Science*, XXVI, 297; *Harv. Grad. Mag.*, Sept., 1907; *Chem. Zeitung*, May 4, 1907.

21. Die neuere Entwicklung der Chemie in Amerika. By T. W. **Richards**. *Internat. Wochenschrift*, I, 83.

22. The Carnegie Institution of Washington. By T. W. **Richards**. *Internat. Wochenschrift*, I, 163.

23. Charles William Eliot. By T. W. **Richards**. *Internat. Wochenschrift*, I, 392.

24. Neuere Untersuchungen über die Atomgewichte. By T. W. **Richards**. *Ber. d. deutsch. chem. Gesell.*, XL, 2767.

25. Hydrazones of Aromatic Hydroxyketones. Alkali-insoluble Phenols. Preliminary Paper. By **Henry** A. **Torrey** and H. B. **Kipper**. *Journ. Am. Chem. Soc.*, XXIX, 79.

26. On Ethylpyromucylacetate. Preliminary Paper. By **Henry** A. **Torrey** and J. E. **Zanetti**. *Am. Chem. Journ.*, XXXI, 539.

27. The Solubility of Potassium Permanganate. By **Gregory** P. **Baxter**, A. C. **Boylston**, and R. A. **Hubbard**. *Journ. Am. Chem. Soc.*, XXVIII, 1336.

28. Note on the Insolubility of Ferric Hydroxide in Ammoniacal Solutions. By **Gregory** P. **Baxter** and R. A. **Hubbard**. *Journ. Am. Chem. Soc.*, XXVIII, 1508.

29. A Revision of the Atomic Weight of Manganese. By **Gregory** P. **Baxter** and M. A. **Hines**. *Journ. Am. Chem. Soc.*, XXVIII, 1560; *Zeitschr. f. anorg. Chem.*, LI, 202.

30. A Revision of the Atomic Weight of Cobalt. By **Gregory** P. **Baxter** and F. B. **Coffin**. *Journ. Am. Chem. Soc.*, XXVIII, 1580; *Zeitschr. f. anorg. Chem.*, LI, 171.

31. The Carrying Down of Ammonium Oxalate by Oxalates of the Rare Earths. By **Gregory** P. **Baxter** and R. C. **Griffin**. *Journ. Am. Chem. Soc.*, XXVIII, 1684.

32. The Vapor Pressure of Iodine. By **Gregory** P. **Baxter**, C. H. **Hickey**, and W. **Chapin Holmes**. *Journ. Am. Chem. Soc.*, XXIX, 128.

33. Concerning Position Isomerism and Heats of Combustion. By **Lawrence** J. **Henderson**. *Proc. Am. Acad.*, XLII, 639; *Zeitschr. f. phys. Chem.*, LX, 413.

34. Ueber ein neues Octan. By **Latham Clarke**. *Ber. d. deutsch. chem. Gesell.*, XL, 332.

CHARLES R. SANGER, *Director*.

THE JEFFERSON PHYSICAL LABORATORY.

To the President of the University: —

Sir, — The total number of students enrolled in the eighteen electives in Physics during 1906–07 was 409. The attendance on many of the higher electives was small; but one should reflect that the best trained men, who become professors, engineers, and heads of great enterprises, receive their education in small courses where there is a great opportunity for individual instruction.

Forty students attended the summer courses in the Laboratory.

Six graduate students were engaged in researches during the year.

The changes in equipment consisted in a much needed small lecture room, capable of seating ninety students, in which recitation and quizzes of sections can be held; and some necessary additions to the machine shop.

Professor G. W. Pierce has installed a wireless telegraph station, including a mast with antennae, which has been erected on the roof of the Laboratory. This new installation permits Professor Pierce to extend his investigations and those of his students.

The small library of the Laboratory is much consulted by graduate students, and their work would be greatly facilitated if this library could be increased and placed in charge of an attendant.

The Laboratory has met with two great losses: the appointment of Professor Sabine to the Deanship of the Scientific School prevents the constant and daily presence in the Laboratory of an inspiring teacher and investigator; and the illness of Professor Hall compelled a cessation for the year of his important work in heat, and removed an admirable lecturer.

The fourth volume containing the researches of professors, instructors, and graduate students, for the year 1906–07, is in press.

The researches of graduate students were as follows: —

Light through Thin Films. By W. B. Cartmel.

Effect of Ultra Violet Light on Ionisation. By F. Palmer.

Investigation in Heat. By L. L. Campbell.

Investigation of the Effects of High Pressures. By P. W. Bridgman.

Distribution of Magnetism on Long Cylinders. By C. L. B. Shuddemagen.

Professor Kent of Boston University was given the facilities of the Laboratory for an investigation of the displacement of spectral lines.

The investigations of the professors, instructors, and assistants were as follows: —

Study of the so-called Canal Rays. By JOHN TROWBRIDGE. These rays are believed to open a new and important field for investigation of the nature of electricity.

Investigation in Magnetism. By B. O. PEIRCE. This is an exhaustive study of the time required to build up magnetism in circuits containing iron.

Investigation of the Thomson Effect. By EDWIN H. HALL. The conveyance of heat by electricity along conductors, the so-called Thomson Effect, has an important bearing on the subject of Thermo-electricity, and Professor Hall's investigation is the most exact that has appeared on this effect.

Architectural Acoustics. By WALLACE C. SABINE. Professor Sabine has been engaged in perfecting his means of investigation in this subject which he has made peculiarly his own.

Wireless Telegraphy. By G. W. PIERCE. Professor Pierce's apparatus for measuring the length of the waves employed in wireless telegraphy is coming widely into practical use; he has made a study of the singular property possessed by certain crystals in allowing an electric current to pass only in one direction, and has utilized this property in constructing a new receiver for wireless telegraphy.

Investigation of the Ultra Violet Rays. By THEODORE LYMAN. Dr. Lyman has discovered a marked absorption band in the region of these rays, which is due to oxygen; and this discovery appears to have an important bearing on the subject of Meteorology.

Investigations in Fluorescence. By HARRY W. MORSE. This work is a continuation of Dr. Morse's previous work on this subject, during which he discovered a line spectrum where previously only a band spectrum had been observed.

Longitudinal Vibrations. By HARVEY N. DAVIS. This investigation, besides adding to our knowledge of acoustics, has contributed a new mathematical method of analysis.

Measurement of the Internal Temperature Gradient in Common Materials. By SCHUYLER B. SERVISS. It has been claimed that the traces of radioactive substances in common materials is sufficient to produce a permanent difference of temperature along radii. This research is a careful measurement of this gradient. The results show that the gradient. if it exists at all, is extremely minute.

The following papers have been published during the year: —

Expansion and Compressibility of Ether and Alcohol in the Neighborhood of their Cooling Points. By A. W. SMITH. *Proc. Am. Acad.*, Vol. 42, No. 47.

Experiments on Resonance in Wireless Telegraph Circuits. Part 5. By G. W. PIERCE. *Phys. Rev.*, Vol. 24, No. 2.

A Spectrum of the Röntgen Rays, and the Selective Absorption of these Rays in Different Metals. By J. M. ADAMS. *Am. Journ. of Science*, Vol. 23, February, 1907.

On the Thomson Effect and the Temperature Coefficient of Thermal Conductivity in Soft Iron between 115° and 204° C. By EDWIN H. HALL, L. L. CAMPBELL, S. B. SERVISS, and E. P. CHURCHILL. *Proc. Am. Acad.*, Vol. 42, No. 22.

The Transmission of Röntgen Rays through Metallic Sheets. By J. M. ADAMS. *Proc. Am. Acad.*, Vol. 42, No. 26.

Studies of Fluorite. IV. Kathode Luminescence of Fluorite. By HARRY W. MORSE. *Proc. Am. Acad.*, Vol. 42, No. 1.

Crystal Rectification for Electric Currents and Electric Oscillations. Part 1. Carborundum. By G. W. PIERCE. *Phys. Rev.*, Vol. 25, No. 1.

The Extra Transmission of Electric Waves. By W. B. CARTMEL. *Phys. Rev.*, Vol. 25, No. 1.

The Absorption of some Solids for Light of Extremely Short Wave Lengths. By THEODORE LYMAN. *Astrophys. Journ.*, Vol. 25, No. 1.

High Electromotive Force. By JOHN TROWBRIDGE. *Memoir Am. Acad.*, Vol. 13, No. 5.

JOHN TROWBRIDGE, *Director.*

THE DIVISION OF ENGINEERING.

To the President of the University: —

Sir, — I respectfully submit the following report on the work of the Division of Engineering for the year 1906–07.

The courses of instruction have remained substantially as in recent years, excepting certain small changes and additions to bring the instruction in Engineering into closer relation with the new School of Applied Science. The four courses in research were broadened and enlarged into courses in special fields, and five new offerings were added. The time required for each of them was extended to at least that of two full courses, with the possibility that a student might occupy in one such subject the entire study of one year. Those added were as follows: one course, Engineering 20*e*, on Structures of Wood, Steel, and Stone, intended to run parallel to the course in Re-inforced Concrete given during the previous year; one course, Engineering 20*f*, in Marine Engines and Boilers, for students who wished simply to supplement their instruction in Mechanical Engineering with a further study of the designing of machinery and boilers for marine purposes — it was not planned as a complete course for students in marine engines or naval architecture; one course, Engineering 20*g*, on Machinery and Boilers for Power Stations, intended as a continuation of the course on the Designing of Machinery and Boilers, Engineering 14*b*; one course, Engineering 20*i*, on Specifications and Cost Data for Civil Engineering Construction, for Graduate Students who wished instruction and practice in making out estimates on large work; one course, Engineering 20*j*, on Commutation in Direct-Current Machines, planned mainly as an application to the design of direct-current machinery.

All of these courses were intended for Graduate Students returning for the professional degree of Master in Engineering. There were four such students in this first year of their special designation as part of the advanced work in the Graduate School of Applied Science. While the number was small, the seriousness of purpose evinced by the students made the courses extremely interesting to the instructors. It is doubtful, however, if such advanced courses can ever be made attractive to large numbers of students without first-rate opportunities for research in Engineering laboratories where theoretical study can be combined with observation on practical matters relating directly to the Engineering profession. The first questions asked by students who are seeking advice after they have graduated from college relate to the bearing of courses upon their future careers in Engineering; and anything which looks like theoretical study without application or experiment in some kind of industry is avoided. And the judgment of students that they want laboratory experience seems, on the whole, sound.

Besides the new courses for Graduate Students, a new course in Mathematics was added as an alternative for the three half-courses, Algebra (Engineering 1*a*), Trigonometry (Engineering 1*b*), and Analytical Geometry (Engineering 1*d*); now commonly given to first-year students expecting to go into some kind of Engineering. It was hoped that the time of students might thus be employed to better advantage, by giving them these three subjects in sequence, or in such relation to one another that the same topic should not be covered more than once. The hours required were established at three two-hour periods per week, in order to secure a large amount of problem work under the immediate supervision of the instructor.

A similar change was made in Calculus (Engineering 1*c*) by expanding it to three two-hour periods of lectures and problem work, in place of three one-hour lectures.

These two changes in the mathematical courses followed naturally upon the experience with Statics and Kinetics, which have been so successful under the direction of Professor Johnson and Professor Huntington that it seemed worth while to introduce the system elsewhere. So far as could be judged by the experience of the year, the change was well suited to the needs of the average student who takes Mathematics because it is prescribed, and who should have close contact with the instructor for conference and help, — the exact position of most students who contemplate going into Engineering. While the change indicated considerable improvement on the average, there is nothing to show that the brighter students might not have done as well with Mathematics as formerly given.

The course in Machine Design (Engineering 14*a*) was increased from a half to a full course, for the purpose of improving the drafting work of students of Engineering. There is no doubt that Professor Kennedy is thus able to send students into the Senior Class much better fitted to profit by their instruction.

At the Squam Lake Camp, the course in Railroad Engineering (Engineering 4*d*) was expanded to a full course by giving five weeks instead of three to the subject. The course in Geodetic Surveying, Engineering 4*c*, was increased from two weeks to three weeks. Inasmuch as this subject is very special, and would ordinarily be taken only by students expecting to enter the Coast Survey, it was made optional for civil engineers. In this connection, it may be added that the instruction at the Camp was attended with its usual success under Professor Hughes. The total number of full-course enrolments for the summer was two hundred and one, of which eight were in Statics, Kinetics, and Resistance of Materials, leaving one hundred and ninety-three in Surveying and Railroad Engineering. The unexpected rise in provisions, which came after the fees for the summer had been fixed, was the cause of a small deficit in maintaining the Camp. To the difficulty of the situation was added a large amount of repair work, on which the cost was considerably higher than in former years. It will be necessary in the future to put by a small sum every summer for repairs, changes, and additions. There should be a good road leading to the water front, and the kitchen should be moved to a higher grade, whence all drainage might be led through the filter beds before running into the lake, instead of being pumped, as at present. To accomplish fully the purposes for which the Camp was established, the University should assume part of the running expense, such for instance as paying part or all of the salaries of the instructors. It hardly seems fair to charge against the student fees changes and additions that would add much to the convenience and usefulness of the Camp. The Division of Engineering hopes to make the property even more useful to the University by the introduction of other courses.

The full-course enrolments are given in the following table for the past three years: —

	1904–05	1905–06	1906–07
Total full-course enrolments	1450.5	1364.5	1221.0
First-year Mathematics	204.5	195.5	112.5
Engineering subjects, including Calculus	1246.0	1169.0	1108.5

This table shows a small falling off, which might very well have been expected in the transition period following re-organization and the gradual disappearance of the four-year courses. This falling off seems to have taken place mainly in first-year Mathematics, and can easily be accounted for. It is but natural that students registered in the College should take their Mathematics in the Department of Mathematics, and it would probably be better to teach all the first-year Mathematics for engineers in that Department. Calculus for engineering students should perhaps be continued indefinitely in the Division of Engineering, as a distinct saving of time can be effected in connection with Applied Mechanics, and the same instructor now gives both subjects. In returning Elementary Mathematics to the

Mathematics Department, if that should seem desirable in the future, some account should be taken of the different attitude of mind of students who take Mathematics as an elective and of those who take it because they have to. By organizing the classes into sections of comparatively small numbers, this difference can be taken care of.

Another influence which has probably affected the numbers in Engineering has been the more uniform enforcement of entrance requirements by a single committee acting for all undergraduates. This has undoubtedly served to lift the grade of students who enter for science and, as there is a noticeable improvement, has made the teaching of Engineering much more satisfactory. There have also been during the past four years some changes and reduction in the number of courses offered by the Division, for the purpose of lightening the work of the teaching staff. The above table shows the full-course enrolments in Engineering, but it does not represent the number of students who are working towards an Engineering degree. Judging from those who have sought advice, the number has not decreased, but on the contrary has increased considerably, and the preparation has seemed strikingly improved. The seriousness of purpose of the students has been very refreshing, and one evidence of this is in the increase of interest in the Engineering Society, as shown by better attendance and generally better meetings. The activity of the students in small groups, like the Electrical Club and the Mechanical Club, has been marked.

The Division has continued to take advantage of the numerous manufacturing establishments in the neighborhood of Boston for the instruction of students, and a number of interesting tests were run during the year. The great difficulty about such tests, however, — in fact, an almost insuperable objection, — lies in their lack of completeness. In few cases can the conditions be made favorable to scientific accuracy, on account of the expense necessary in changing the piping systems, and in general in arranging for accurate observations. No firm cares to make additions or modifications in an established plant for the purpose of assisting a college or university, although the greatest courtesy is often extended in permitting students to examine and test machinery and boilers as they are fitted. It would be hardly reasonable to expect a power station to interrupt its service for the purpose of facilitating experiments which do not yield even a small commercial return. Under ordinary circumstances, therefore, the only method of doing really satisfactory work will be found in the laboratories belonging to the University, where conditions can be made entirely suitable for extended experiment. At present, the laboratories at Harvard are deficient of nearly everything approaching a commercial scale. They are suited for undergraduate instruction and for teaching young men how to make accurate observations, but they are of comparatively little use in getting results which would serve to stimulate the study of Engineering in the whole student body.

The experience of the year has indicated the necessity of some revision of the programme of studies for Engineering degrees. With the disappearance of the four-year courses of the Lawrence Scientific School, this revision can be brought about rationally and to the great simplification of the work in the new Graduate School. When framing a five-year course under the conditions of keeping the four-year course for Engineering students, the Division found itself in the position of making troublesome compromises. Then, too, the old programmes were somewhat overcrowded for the ordinary student. The addition of one year to the time required for the first degree in Engineering will permit the instruction to be strengthened and to be spread over a longer period. It should not be forgotten that the instruction in Engineering must be planned for the average student much more than for one of such exceptional talent for Engineering that he would become an engineer after almost any kind of a college course. It is, therefore, the ordinary boy that we must take care of, with the expectation of offering exceptional opportunities to brighter men entering the last year of the Graduate School. The University cannot hope to do more in the Graduate School of Applied Science for Engineering than in the old Scientific School excepting in laboratory research as the great stimulus for study. Engineering is after all nothing more than the application of Physics, Chemistry, and Mathematics to commercial industry and construction. If the commercial relation is lost sight of in the advanced courses, as distinct from elementary and fundamental subjects, these courses fail in effectiveness. The question then comes to this: Can a student do as well for himself by spending a fifth year in the study of Engineering as he can by spending that year in the practical application of his profession? We hope he can; and to much better advantage here at Harvard. We are sure that he can with the equipment in Engineering that the University ought to have for that purpose.

During the year Professor L. S. Marks was in Germany on leave of absence, studying internal combustion motors and visiting various technical schools and manufacturing establishments. His work was taken by Mr. S. A. Reeve, Mr. A. H. Morse, and Professor Hollis.

IRA N. HOLLIS.

THE PSYCHOLOGICAL LABORATORY.

To the President of the University: —

Sir, — The year of this report was the first year spent entirely in the new Psychological Laboratory in Emerson Hall. Thus it has naturally demanded many minor improvements and readjustments in the technical outfit of the new institution; but, on the whole, the new laboratory showed itself satisfactory and well-fitted in every particular. The equipment has been supplemented during the year by valuable optical and acoustical instruments, especially photometers, so-called tone variators, microscopical attachments to the stereopticon, and so on. Much attention has been given also to the further development of the mechanical workshop, which is now fully prepared to fulfil all the demands of the laboratory. One room has been carefully fitted up for the special needs of aesthetic experiments.

The work of the laboratory has proceeded in the traditional path. All the instructors of the laboratory feel with great satisfaction the change which results from the fact that the material for experimental demonstration in all the psychological lecture courses can now be brought easily to the lecture rooms. The chief activity of the laboratory belongs again to the research work.

The following investigations have been carried out during the year: In the field of human psychology Mr. E. P. Frost began a systematic study of correlations between individual differences. The investigation, which will demand several years, tries to bring out with the subtlest methods of modern psychology how far variations of the mental personality in one direction carry with them variations in other directions. Mr. C. A. Barnes studied the psychology of arithmetical processes, especially by the method of time measurement of calculations under various conditions, in thousandth parts of a second. Mr. T. Nakashima began the study of the latent period of feelings, examining the time necessary to produce pleasure and displeasure. The problem of feeling was approached from another side by Mr. H. Taylor. He studied the relations of feelings to physical attitudes, especially to contraction and relaxation of muscles. Mr. H. M. Sheffer entered into an analysis of the memory processes by examining the relative value of associations by similarity and associations by contiguity. Mr. B. P. Boultenhouse also studied the processes of memory, comparing, in the interests of educational psychology, the memory for events, actively and passively experienced; he also began another investigation of symmetrical tactual sensations. In the field of visual sensations the chief study was that of Mr. A. Mitchell who determined the visual threshold on opposed points of the retina. Mr. C. A. Pierce started an experimental study of the mutual inhibition and re-enforcement of ideas. Miss E. L. Davis continued the long series of aesthetic studies of the laboratory by an experimental study of the pleasure in vertical divisions.

In the field of animal psychology Mr. C. S. Berry carried to completion his study of the imitative tendency of the Manx cat. He submitted as his doctor's thesis a discussion of the imitative tendency in animals, a part of which has been printed under the title, "The Imitative Tendency of White Rats," in the Journal of Comparative Neurology and Psychology, Vol. XVI. Mr. T. Nakashima conducted an inquiry into the modifiability of behavior in the larvae of the beetle *Tenebrio molitor*. Mr. O. S. Ricker studied the habits and the process of habit-formation in certain lizards. Dr. Karl Waugh completed his experimental investigation of the visual capacity of the mouse, and submitted a doctorate thesis on that subject.

Of the experimental work of the instructors there may be especially mentioned Professor E. B. Holt's investigations on the vision of colors in the neighborhood of the blind spot, and Dr. R. M. Yerkes's studies of the senses and educability of the dancing mouse, with special reference to Weber's Law and to the relation of modifiability of behavior to age. Dr. Yerkes's complete experiments with this animal are included in his recent important volume, "The Dancing Mouse, A Study in Animal Behavior" (New York, Macmillan Co., 1907, 290 pp.). My own experimenting was mostly concerned with problems of applied psychology, especially with the relation of experimental psychological methods to medicine and law.

The most notable improvement in the whole life of the laboratory has resulted from the permanent appointment of a trained mechanic. The laboratory had been dependent until then upon the very irregular work of the mechanical workshops in Boston, or had to demand an unreasonable amount of time and energy from instructors and students for the technical preparation of the experiments. Our mechanic, Mr. Kelley, a graduate of the Cambridge Manual Training School, and the excellent workshop of the laboratory have brought a remarkable improvement into the technical conditions of the work. His salary is paid from a part of the permanent income of the laboratory for equipment and work which our anonymous benefactor endowed. As the remaining part is fully sufficient for additional instruments each year, the laboratory is sufficiently provided for its real work. We feel therefore, all the more, the lack of funds for the publication of our work. The first two volumes of the Harvard Psychological Studies (Boston, Houghton, Mifflin & Co.) could be published only by special donations, as the very technical character of the contents makes it almost impossible that the expense of printing these volumes of 650 pages each could be covered by sale. A fund from which the third and the following volumes might be published at the rate of one volume a year is thus our most immediate need.

HUGO MÜNSTERBERG,
Director of the Psychological Laboratory.

THE OBSERVATORY.

To the President of the University: —

Sir, — The principal return of an astronomical observatory, for the money expended upon it, ordinarily consists of its publications. By this test, the cost of each volume is very great, many times that of the mere cost of printing. A restriction in the publication funds is therefore a very unwise economy. At the Harvard Observatory, every effort is made to secure a large return for the money expended. Besides the Annals, important minor publications are made, numerous discoveries are announced, and the collection of astronomical photographs furnishes a never ending source of information regarding the condition of the sky, which increases in value with each successive year. The unrestricted gift of Mr. Charles S. Fairchild, of five thousand dollars, which has been duplicated according to agreement by another donor, is permitting a great extension to be made in the work of publication. An increase in the force of assistants available for the study of the photographs and a suitable building for the astronomical library are still urgent needs.

The large number of publications of this Observatory and of objects of various kinds discovered here render desirable a comprehensive notation to designate them. Accordingly, the letters H. A., followed by a number, will be used to indicate the Harvard Annals, H. B. the Bulletins, H. C. the Circulars, and H. M. the Harvard Map of the Sky. H. N. will indicate nebulae and clusters discovered here, and H. V. new variables. H. P. indicates the Harvard Photometry, in H. A. **14**, and H. R. the Revised Harvard Photometry, in H. A. **50**.

East Equatorial. — The observations with this instrument have been made by Professor O. C. Wendell, and have been of the same general character as in previous years. Nearly thirteen thousand photometric comparisons have been made, principally with the polarizing photometer with achromatic prisms. A large part of these measurements relate to stars of the Algol type, and serve to determine their light curves and times of minima. Measurements for determining the correction to the period have also been made, when the light was varying most rapidly. Observations of several other known variables, not of the Algol type, have also been made. Many stars of doubtful variability have been observed, since the accuracy of the measurements permits even slight changes to be detected with certainty. Fifteen hundred measures have been made of the light of the asteroids, Iris (7), Eros (433), and Kreusa (488), to determine the nature of their variability. Thirteen hundred similar measures have been made of 32 stars having spectra of the fourth type, and the variability of several of these has been established.

With a second photometer adapted to the measurement of adjacent objects, twenty-six hundred measurements of double stars have been made. Twenty-three eclipses of Jupiter's Satellites have been observed photometrically, making 837 in all.

Meridian Circle. — H. A. **62**, Part I, was printed during the period covered by this report. It contains the observations of the fundamental stars for the zone — 9° 50′, to — 14° 10′, and the adopted constants of reduction for the zone stars. The corrections, depending upon these constants, have been applied to more than three fourths of the zone observations, and the results have been collected for about one fourth of the zones. It is expected that the final discussion of the zone observations will be far advanced, if not completed, in a few months.

The appointment as "Assistant Emerita" of Miss S. C. Bond, for nearly thirty years a computer in this department of the Observatory, establishes a precedent which it is hoped may be followed in other similar cases. Such appointments, in the case of women, have been rare.

Meridian Photometers. — With the 12-inch Meridian Photometer, 37,140 settings have been made by the Director, on 87 nights. In all, 613,904 settings have been made with this instrument during the last nine years. The reduced number of observations, made during the last year, has been due partly to the want of a recorder, and partly to the completion of the work assigned to this instrument. New work was not undertaken, since it was expected that better observations could be made, and extended to much fainter stars, with the 60-inch reflector. The mounting of the latter instrument is still unfinished, but it is hoped that its completion will not be delayed much longer.

The work of the 4-inch Meridian Photometer may now be regarded as practically completed. The results, however, are scattered through eight volumes of the Annals. The results for all the brighter stars, from the North to the South Pole, have been collected in a single volume entitled the Revised Harvard Photometry. The work, which is nearly all in type, will contain a Catalogue of 9110 stars of the magnitude 6.5, and brighter. It will furnish the class of spectrum, as well as the magnitudes of these stars as given in each of the various volumes of our Annals, and also the magnitudes given in other photometric catalogues.

Henry Draper Memorial.

The number of photographs taken with the 11-inch Draper Telescope was 356, making 17,035 in all; with the 8-inch Draper Telescope, 611, making the total number, 34,886. The entire number of photographs of the stars taken at Cambridge during the year is 3,200. Nine eclipses of Jupiter's Satellites have been successfully photographed with the 11-inch Draper Telescope. The spectra of 456 stars, taken with the 11-inch Draper Telescope, have been studied in detail and classified by Miss Cannon. A catalogue giving the class of spectra of more than twelve hundred stars, north of declination —30°, and not contained in H. A. **28**, is thus nearly completed. A similar classification of 745 southern stars, taken with the 13-inch Boyden Telescope, has also been made.

Mainly from the study of the photographs of spectra taken with the 8-inch Draper, 8-inch Bache, and 24-inch Bruce Telescopes, Mrs. Fleming has found 19 new variable stars, 5 stars of the fourth type, 1 of the fifth type, 6 in which the hydrogen line $H\beta$ is bright, 1 gaseous nebula, and 3 in which the spectra are peculiar. Nova Velorum was also found independently from its spectrum which had become like that of a gaseous nebula. The hydrogen lines have been found to be bright in 4 known variable stars, R Geminorum, RT Herculis, SX Cygni, and 230909 — Pegasi. The spectrum of V Ophiuchi is of the fourth type. Nine meteor trails were found on chart plates. Much work has been done in examining and classifying spectra of stars contained in H. A. **50**, too faint to be photographed with large dispersion, or whose class of spectra was given as doubtful in the Draper Catalogue. One new variable star has been found by Miss L. D. Wells. Sequences of comparison stars for 222 variables, mainly found from the presence of bright hydrogen lines in their photographic spectra, have been selected and measured by Mrs. Fleming, and published in H. A. **47**, Part I. The relative positions and photographic magnitudes of about three thousand stars are included in this work. Photographic standards of magnitude are thus furnished for these variables. It is hoped that later the magnitudes of all may be reduced to a uniform and standard scale.

BOYDEN DEPARTMENT.

The Arequipa station has remained in charge of Mr. R. H. Frost, the senior assistant there. The number of photographs taken during the year, with the 13-inch Boyden Telescope, is 429, making 11,847 in all; with the 8-inch Bache Telescope, 961, making 38,224. The total number of stellar photographs taken during the year is 2,719. The Bache Telescope, which was sent to Cambridge for repairs, was returned to Arequipa, remounted, and the first photograph was taken with it on April 20, 1907. The number of settings with the meridian photometer was 1,784; with the Rumford photometer, 2,316; with the double-star photometer, 736; total, 4,836. 317 observations have also been made, of 50 southern variables of long period.

Meteorological observations, three times a day, have been continued as in former years, and visual observations of the cloudiness have been made hourly throughout the year.

BRUCE PHOTOGRAPHIC TELESCOPE.

The number of photographs taken with the 24-inch Bruce Telescope was 372, of which 45 are spectrum plates, and 61 are charts having exposures of one hour, or more. The total number of photographs so far taken with this instrument is 8,514. These plates continue to be the most valuable in the observatory, for the study of very faint objects. The large scale also renders them very useful when accurate positions are to be determined. This instrument, as well as some of the smaller instruments, is used for the determination of photographic magnitudes, by photographing two regions on the same plate, under precisely similar conditions. A number of the regions selected by Kapteyn have also been photographed with exposures of 120 minutes.

About seventeen hundred new nebulae have been found from the Bruce photographs, by Messrs. Bailey, Frost, and Stewart. In general, with exposures of one hour, the number shown is about equal to that already known, while with exposures of four hours, the number is often many times as great.

BLUE HILL METEOROLOGICAL OBSERVATORY.

The work of the Observatory was performed, under the direction and at the expense of Professor Rotch, by the same permanent staff as in preceding years. Apart from the routine observations, the principal work has been, as heretofore, the exploration of the upper air with kites. The kite-windlass was rebuilt, and a gasoline motor substituted for the steam-engine, but with unsatisfactory results. This and insufficient wind interfered with the kite-flights on the nineteen term-days appointed by the International Committee for Scientific Aeronautics, so that of the sixteen flights at Blue Hill but seven could be made on the prescribed days. The average of the greatest heights attained in each flight was 6,037 feet above sea-level, and the maximum in any flight, 12,060 feet. During the week in July, which was designated for the international exploration of the atmosphere, kites were also flown, by the Observatory, near the base of Mount Washington, New Hampshire, and observations were obtained daily, either in the free air up to the level of the summit (6,300 feet) or on the mountain itself, where a meteorograph was maintained during the summer by Mr. S. P. Fergusson. Another grant from the Hodgkins Fund will enable a final series of *ballons-sondes* ascensions to be made at Saint Louis during the autumn, at a time when observations at great heights are lacking in America.

MISCELLANEOUS.

Variable Stars. — The visual observations of long period variables have been maintained throughout the year, the working list at Cambridge now containing 324 stars. Mr. Campbell has made 896 observations of them with the 24-inch reflector and 654 with the 5-inch telescope and a field glass. Miss Cannon has made 489 observations and Mr. Manson 180, both with the 6-inch West Equatorial. The observations of those visible during the latter part of the night only have been made by Mr. Campbell and Mr. Manson. 1,112 observations have been communicated to the Observatory, of which 661 were received from Miss Whiteside, now of Whitin Observatory, 207 from Professor Whitney of Vassar College, 83 from Mr. Eadie, 72 from Miss H. M. Swartz, 51 from Mr. Paul Blanc, and 38 from Mr. Felix de Roy. The total number, including 317 of fifty southern variables, made at Arequipa, is 3,648. The contributions to Popular Astronomy of the approximate magnitude of these variables, for the first of each month, compiled by Mr. Campbell, have been continued. The observations of Seventy-five Long Period Variables, during the years 1902 to 1905, and a discussion of these observations, and also of those contained in H. A. **37**, have been printed in H. A. **57**, Part I. Part II of the same volume, containing lists of comparison stars for 250 long period variables, is nearly ready for printing.

The success which has attended the examination of the photographs, for the discovery of new variable stars, by the superposition of a series of negatives upon a positive contact print made from one of them, suggested the extension of this method to the entire sky. Accordingly, the 55 photographs, forming the Harvard Map of the Sky, are now being examined in this way. Regions 3, 6, 9, 12, 15, 18, 21, 48, and 51 have been examined by Miss Leavitt, and 93 new variables found. 37 variables, found in Region 50, were announced last year. Regions 37, 46, 62, and part of 31, have been examined by Miss Cannon, and 31 new variables found. Regions 2, 5, 44, and 53 have been examined by Miss Leland, and 8 new variables found. It appears probable that about one third of all the variables of the eleventh magnitude and brighter have already been discovered, and that one third will be found in this investigation.

The Second Catalogue of Variable Stars, by Miss Cannon, H. A. **55**, Part I, is the most complete work of its kind as yet published. Of the 3,748 known variable stars, 2,909 have been discovered here. H. A. **60**, No. 4, gives accurate positions of 1,777 variable stars discovered by Miss Leavitt in the Magellanic Clouds, and H. A. **60**, No. 5, is a memoir on ten Algol variables discovered and discussed by her.

Needs of the Observatory. — The gifts already mentioned have provided, for the present, in a very satisfactory manner, for one of the most urgent needs of the Observatory, the publication of its Annals. They also have permitted a small increase in the number of assistants engaged in the study of the photographic plates. The amount of valuable material contained in these plates is indeed vast. Every day, examples occur of the ease and economy with which astronomy may thus be advanced. An admirable field of work for women has been opened, and a great increase in the number now engaged in this work is much to be desired. The want of a fireproof building for the library is still unsupplied. A moderate sum only is needed to erect an extension of the building now used for storing the photographic plates. This would permit a large part of the library to be housed safely.

Observatory of the Rev. J. H. Metcalf. — It is the policy of the Harvard Observatory to aid, when possible, specialists who display marked skill in any department of astronomy. Coöperation has accordingly been established and continued with the Observatory of the Rev. J. H. Metcalf, so that the work there has been materially extended. This secures for the Harvard Observatory the immediate use of many excellent photographs, and the eventual possession of certain valuable instruments. During the past year, Mr. Metcalf and his assistant have taken 200 photographs with a 12-inch doublet constructed by him. The greater portion of these plates were made by following upon a star, and giving an additional motion to the plate equal to that of an asteroid. This method proves extremely effective in discovering and following asteroids, and has led to the discovery of 33 asteroids, and of comet 1907 b, by Mr. Metcalf. The planet Eros also was found readily on July 4, 1907, on the first photograph taken for this purpose.

Library. — The Library of the Observatory has been increased by 346 volumes and 1,455 pamphlets. The total numbers of volumes and pamphlets in the Library on October 1, 1907, were 12,224 and 25,225, respectively. This collection, one of the finest of its kind in the world, is in constant danger of destruction by fire, and is scattered through the rooms of the Observatory. A suitable building to contain it is one of our greatest needs.

Telegraphic Announcements. — Thirty telegraphic announcements have been issued. Of these, eight were received from the U. S. Naval Observatory, six from the Lick Observatory, four from Kiel, three from Rev. Joel H. Metcalf, two from the Students' Observatory, Berkeley, Cal., two from Professor Cogshall, and one each from Professors Morgan, Paine, Comstock, Lowell, and Daniel. The syllabic code, devised by Mr. Gerrish, has continued to give entire satisfaction. For this no code book is required, and a pamphlet furnishing all necessary information will be sent gratuitously, on application. Announcements will be received at this Observatory by telegraph, preferably according to this system, for transmission to Kiel, and for distribution in America. The Astronom Centrale, at Kiel, is prepared to receive announcements in the same system, from other countries than Europe.

Cablegrams intended for this Observatory should be addressed "Observatory, Boston"; and all telegrams, "Harvard College Observatory, Cambridge, Mass." All correspondence relating to telegrams should be addressed to the Director.

These telegrams continue to be supplemented by neostyle bulletins which are printed as soon as the telegrams have been sent off, and distributed by first-class mail. Translated messages together with additional information are thus promptly circulated. 51 bulletins, making 306 in all, have been distributed in this way.

Publications. — The gifts mentioned above, together with the introduction of the monotype, by the Publication Agent, have enabled a great increase to be made in the publications of the Observatory.

H. A. **47**, Part **1**; **52**, Part **1**; **55**, Part **1**; **57**, Part **1**; **60**, Nos. **1**, **2**, **3**, **4**, **5**, and **62**, Part **1**, have been published and distributed this year. Owing to the delay in the preparation of the material intended for publication in H. A. **49**, this number has been assigned to the Meteorological Observations at Arequipa, 1892 to 1895. 103 pages, forming the whole of Part **1**, are in type, and the remainder of this volume is ready for the printer. 197 pages of H. A. **50**, the Revised Harvard Photometry, 53 pages of H. A. **52**, Part **2**, Eclipses of Jupiter's Satellites, and 47 pages of H. A. **58**, Parts **3** and **4**, Blue Hill Meteorological Observations, are in type. Accordingly, the completed Volumes are **1** to **46**, **48**, **51**, and **53**. Also, H. A. **47**, Part **1**; **52**, Part **1**; **55**, Part **1**; **56**, Nos. **1**, **2**, **3**; **57**, Part **1**; **58**, Parts **1**, **2**; **60**, Nos. **1**, **2**, **3**, **4**, **5**; and **62**, Part **1**.

It is the policy of the Harvard College Observatory to render the results of its work as widely accessible as possible. For this reason, large editions of its Annals are published, of which portions only are distributed. They are sent without charge to all the principal observatories and libraries of the world, to a few individuals who it is thought could make use of them, and to a few who it is desirable should be kept informed of the nature and progress of the work. To extend the use of these volumes, and to make sure that they are not wasted by giving them to those who are not likely to use them, it is now proposed to restrict the distribution made to individuals, and to sell copies of the later volumes at a nominal price, which about covers the cost of paper and printing.

Twelve circulars have been issued, whose numbers, titles, and dates are as follows:—

119. Observations of Phoebe in August and September, 1906. November 6, 1906.
120. Thirty-one New Variable Stars. November 10, 1906.
121. *105853.* Nova Velorum. H 1268. November 12, 1906.
122. Thirty-six New Variable Stars. November 24, 1906.
123. Photographs of Faint Stars. January 19, 1907.
124. Stars having Peculiar Spectra. 18 New Variable Stars. January 26, 1907.
125. Standard Stellar Magnitudes. February 25, 1907.
126. Two Variables Discovered by M. Baillaud. February 25, 1907.
127. New Variable Stars in Harvard Map, Nos. 3 and 6. April 12, 1907.
128. Missing Durchmusterung Stars. April 26, 1907.
129. 15 New Variable Stars in Harvard Maps, Nos. 31 and 62. May 10, 1907.
130. 71 New Variable Stars in Harvard Maps, Nos. 9, 12, 21, 48, and 51. July 13, 1907.

Besides the more important publications which have been described above, numerous minor publications have been made by the officers of the Observatory, and are summarized in the University Gazette.

Buildings and Grounds.— The temporary character of the greater portion of our buildings was illustrated by a fire in the residence on March 4, 1907. The entire structure, together with the East Wing of the Observatory, would have been destroyed, but for the prompt action and efficiency of the fire department of the Observatory. Practice drills, without warning, have been maintained every few weeks for several years, in which every officer of the Observatory is expected to participate. By immediate response to the fire signals, the fire, which was rapidly gaining an uncontrollable headway, was extinguished before the arrival of the fire department of the city.

EDWARD C. PICKERING, *Director*.

THE MUSEUM OF COMPARATIVE ZOÖLOGY.

To the President and Fellows of Harvard College: —

It is well to recall in the centenary year of the founder of the Museum of Comparative Zoölogy the indebtedness this Museum owes, in common with similar institutions, to the genius of Louis Agassiz. With broad interests in the investigation, instruction, and the popularization of natural science, he planned the division of this Museum into research collections and into collections for exhibition, at a time when large collections of specimens were useful to professional naturalists alone. For the research collections his zeal knew no bounds, and the investigator in problems in variation, for instance, as a result of that zeal, finds to-day, in certain fields, extensive series of specimens not easily duplicated elsewhere. For purposes of instruction and for the popular exhibition of animal life, Professor Agassiz departed from the usual custom of one great systematic series with very many specimens crowded together, and established the principle of the selection of a small number of characteristic forms, associating recent species and their skeletons in juxtaposition with fossil forms. Moreover, Professor Agassiz's three ideas — first, *synoptic* collections showing the principal types of form and structure; secondly, *systematic* collections with a more extended, though limited, series of typical specimens; and thirdly, *faunal* collections, where the main facts of the geographical distribution of the animals of the earth and ocean are shown — have the same interest and importance they had when the Museum was founded in 1859, and have given the Museum of Comparative Zoölogy an individuality and character of its own.

The late Dr. Charles F. Folsom was a member of the Committee appointed by the Overseers to visit the Museum from 1891 until his death, August 20, 1907; he was also a member of the Committee on zoölogical instruction for the year 1906–1907. Dr. Folsom's interest in the work of these committees was genuine and disinterested. He was instrumental in securing for the Museum the Edward A. and Outram Bangs collection of American mammals.

In the Academic year 1906–1907, twelve courses in Zoölogy were given by Professors Mark, Parker, Jackson, Castle, and Dr. Rand to two hundred and seventy students in Harvard University, and five courses were given to thirty-three students of Radcliffe College. The assistants in the University courses were Messrs. A. M. Banta, H. B. Bigelow, W. S. Burgess, E. D. Congdon, H. S. Davis, C. O. Esterly, J. A. Long, F. F. Marshall, R. C. Mullenix, and W. E. Wing.

Mr. Manton Copeland assisted in two of the courses given in Radcliffe College.

Five students, while at work at the Bermuda Biological Station for Research, received aid from the Humboldt fund.

The instruction in the Department of Geology and Geography was given by Professors Davis, Jackson, Ward, Woodworth, Johnson, and Dr. Mansfield, assisted by Messrs. J. W. Eggleston, F. H. Lahee, H. E. Merwin, E. J. Saunders, and F. H. Sawyer; eighteen courses were given to three hundred and seventeen students of Harvard University, and four courses to twenty-five students in Radcliffe College.

Mr. F. H. Lahee held the Josiah Dwight Whitney scholarship for the year.

In December, 1906, the Faculty appointed Mr. R. W. Sayles Assistant in charge of the exhibition collections in the Geological section of the Museum.

To Mr. Agassiz the Museum is indebted for a model of Bora Bora, a masterly piece of workmanship by Mr. George Carroll Curtis. In November, 1899, while exploring the Tropical Pacific, Mr. Agassiz visited Bora Bora, the most striking of the Society Islands, and an excellent type of the structure and mode of formation of the coral reefs of the group. At the instance of Mr. Agassiz, Mr. Curtis went to Bora Bora in 1904, spending several months there, and from personal surveys and soundings, supplemented by other accessible data, executed this model. Bora Bora is approximately five by three miles in diameter; its central volcanic peak rising to a height of over 2,500 feet and surrounded by a wide lagoon, the wide barrier-reef flat, the narrow fringing reef, and the steep sea slope, are all well brought out by Mr. Curtis. The scale employed is 1–3,600. With the eye at sea level, the natural elevation is obtained.

To install this model in the centre of the Coral room, the Crawfordsville series of crinoids has been removed to new cases built around the rails of the gallery devoted to echinoderms.

From Mr. William Barbour's generous gift for present use, we have obtained, in addition to the egg of the Great Auk mentioned in the Report for 1905–1906, the following specimens: — a series of

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factory records of many of the smaller earthquake shocks which originate in New England and adjacent regions.

By an arrangement with Professor Wolff in behalf of the Department of Mineralogy and Petrography and by means of a grant from the Corporation, the Department has had for three fifths of his time the services of an expert laboratory aid and custodian of teaching materials, Mr. George Marsh Flint.

The Geological Conference was maintained during the year. Twenty-seven "papers" were presented by instructors, students, and former members of the University.

By means of a grant of $250 from its unrestricted fees and the use of fees received for the course from students the Department was able to send a field party to Montana. This party, under the guidance of Dr. Mansfield, fitted out at Bozeman on the 2d of July and carried on an examination of the Bridger range, and later with Professor Wolff a study of the Crazy Mountains, for purposes of geological instruction. Ten Harvard students took this course.

As a matter of record it should be noted that the Department of Mining and Metallurgy, which began under the auspices of this Department and later formed a successful department in the Division, was this year constituted into an independent Division. As a reminder of the former relations of the two Departments we still retain the administration of the instruction in economic geology, given in the laboratories of the Mining Department, and the field course in geology for mining students is conducted in our laboratory.

The demand for graduate students to take scientific positions in the United States Geological Survey and to act as teachers of geology and physical geography in other institutions of learning was greater at the close of the year than we could supply. In the case of candidates fitting themselves for the government service, it is now highly desirable that young men should continue their geological studies until they have obtained the doctorate before taking the civil service examinations, and in the case of many colleges and universities the doctorate is a prerequisite for obtaining a teaching position with the prospect of promotion to a professorship. Many meritorious young men lack the means to maintain themselves in meeting the raised standards of preparation for entrance upon official positions. The various assistantships in the laboratory courses of the Department have thus become invaluable aids to some men. Many students appear to prefer such positions of paid service to money scholarships without the requirement of routine work, probably because the assistantships give the aspiring worker a professional standing and a practical experience, features which are wanting in the conferring of academic distinction which the scholarship conveys.

The Sub-committees of the Department present the following reports: —

The Committee on the Gardner Collection of photographs (Messrs. Woodworth, Ward, and Johnson) report as follows:

State of the Collection, July 1	Photographs.	Slides.	Negatives.
Accessions since last report	111	387	0
Unidentified views on hand	253	30	0
Duplicates on hand	144	51	0
Broken	0	1	0
Condemned	0	0	0
Last accession number	5812	5128	0
Number now in collection	5730	5442	1236

The accessions during the year include a set of 52 lantern slides from negatives made by Mr. Ellsworth Huntington on his journeys in Central Asia, and a set of remarkable photographs of water-spouts; some views of the 1906 eruption of Vesuvius taken by Mr. E. J. Saunders. The collection of slides having outgrown the cases previously constructed, a large case on a quite different plan has been built with a capacity for holding 13,550 standard American slides, 10,000 of which may be placed in the top of the case so as to be readily accessible. Dr. Mansfield gave a part of his time during the year to the cataloguing and care of the collection. Hereafter this work will be done by Mr. Flint.

The Committee on the Geological Museum (Messrs. Woodworth, Jackson, and Wolff) report that Mr. R. W. Sayles has been appointed Assistant in charge of the exhibition collections by the Faculty of the Museum of Comparative Zoölogy; a few purchases and additions of materials by gift have been made. The Museum is indebted to Professor W. O. Crosby of the Massachusetts Institute of Technology for the gift of a suite of rocks and fossils, the latter illustrating methods of fossilization. Specimens have also been received from Professor Palache. The gift of a collection of coral reef and phosphate rock from Ocean or Banaba Island, lat. 52° S., long. 169° 53′ E., Pacific Ocean, sent by Mr. Andrew F. Hall of that island, is gratefully acknowledged.

The Committee on the Josiah Dwight Whitney Scholarship (Professors Davis, Wolff, and Woodworth) recommended in June, 1907, that a scholarship of $200 be awarded to Mr. Frederick Henry Lahee, of Cambridge, Massachusetts, a student in Harvard College, for defraying his travelling expenses in Course S2 in Montana in the summer of 1907.

The annexed abstracts of the reports of the instructors set forth the condition of the several laboratories.

Professor Davis, Sturgis-Hooper Professor of Geology, reports that the addition of Assistant Professor D. W. Johnson to the departmental staff has made it possible to transfer the course on the Physiography of the United States (Geology 6) to his charge, leaving Professor Davis for the past year to give the advanced course in Physiography (Geology 20*a*) which has been conducted on the same plan as heretofore, except that a larger amount of time than usual has been given to individual conferences. The topics treated were: The Italian Riviera and the cliffs of Normandy, by Mr. E. J. Saunders, who had visited those typical coasts during a summer journey abroad; the Wind-river range of Wyoming, by Professor E. G. Woodruff, who had studied these mountains the previous summer in connection with work for the United States Geological Survey; the Physiography of the New York Central and the Pennsylvania railroad routes from New York to Chicago, by Mr. A. S. Cobb, who made a trip along the two lines, with numerous stops on the way, in connection with his study of their economic relations; the features of central England treated as a belted coastal plain, and of central Sweden treated as a district of faulted blocks, once base-levelled and now redissected, by Mr. W. N. Johnstone; the state and national boundaries of the United States, by Mr. A. T. French; the relation of irrigation to physiography, by Mr. J. H. Giles; and the physiographic factors that are significant as plant controls, by Mr. H. E. Merwin. Several of the theses in which the results of these studies were presented at the close of the year were well advanced; yet, as has usually been the case, it appears practically impossible for a student who gives no more than a quarter of his time to topics such as those stated above, to complete an essay ready for publication within the academic year. Professor Davis believes that it would be more profitable if half, or more than half, of the student's time were given to this course, and if the completion of an essay suitable for publication, creditable alike to the student and to the department, were made a requirement.

In association with the advanced course on Physiography, he held many conferences with Mr. Ellsworth Huntington, who, as Hooper Fellow, was writing an account of his recent travels in Central Asia, and discussing the records of subrecent changes of climate and their effect on human history.

Two afternoon lectures were given on the preparation of geological diagrams, as a contribution to instruction in technique, with which most of our students have insufficient acquaintance.

During the absence of Professor J. H. Wright, Dean of the Graduate School of Arts and Sciences, Professor Davis served as Acting Dean.

The New England Intercollegiate Geological Excursion being now well established as an annual autumnal field reunion of professors and advanced students of geology in our schools and colleges, a similar reunion of teachers and students of geography was initiated in the spring, as a means of bringing about further improvements in geographical teaching. A day's meeting, with morning and afternoon sessions, was held in Cambridge, with the decision to meet again in coming years.

The example of the Medical School in offering free Sunday afternoon lectures on scientific subjects as a means of increasing the relation of the School to the public, seemed to Professor Davis worthy of imitation by other departments of the University; and hence, with the consent of the Director of the University Museum to make the experiment, Professor Davis secured the coöperation of several members of the Museum staff in announcing a series of Sunday afternoon lectures in the Geological Lecture room. Lectures were given by Professors Goodale, Davis, and Wolff, Assistant Professor Johnson, and Dr. Tozzer. These lectures were well attended and excited many favorable comments on the part of those present. Professor Davis trusts that a similar series may be announced for the coming winter.

Much time was given in the spring and summer to the preparation of a series of Practical Exercises in Physical Geography, for use in schools. There has been increasing need of such exercises for a number of years past, in order to give a more disciplinary quality to the study; a quality which it sadly lacks to-day, if one may judge by the very disappointing results of our admission examinations in Physiography. A serious difficulty was encountered in the preparation of the ideal diagrams of typical land forms, on which a number of the exercises are based. No professional artist could be found who combined a sufficient knowledge of the subject with a trained delicacy of handiwork, and as a result Professor Davis had to prepare all the drawings himself, with what success remains to be seen.

At the end of the summer Professor Davis went to England to attend the Centenary Celebration of the Geological Society of London and took advantage of the journey to see something of the North Wales and the Lake District as subdued mountains of pronounced glacial erosion, and of Devonshire-Cornwall, as uplands of normal dissection. The contrasts of the glaciated and non-glaciated areas were in the highest degree instructive.

Professor R. T. Jackson reports that Geology 11 was taken by 4 students; Geology 15 by 3 students.

The teaching collections are in good condition, and have been materially increased and improved by the following specimens selected and purchased by Professor Jackson: from Dr. F. Krantz, 41 lots; from R. F. Damon, 65 lots; from James Lomax, 78 microscopic slides; also from the Boston Society of Natural History, 70 specimens.

In the April recess a party of instructors and students visited Yorktown, Virginia, and secured an excellent representation from the rich fossil beds of that locality.

Professor Ward reports that the decrease in the number of students in the elementary course in Meteorology (Geology *B*), which was stated in last year's Report to be directly traceable to the assignment of the lectures to a late afternoon hour, has resulted, as was inevitable, in a falling off in the attendance of students upon the intermediate courses in Meteorology and Climatology. It does not appear wise, in the light of this experience, to continue to give the lectures in the elementary course at 3.30 P.M., and the Department has therefore voted that they shall hereafter come in the morning, as formerly. The students' meteorological observatory, on the roof of the Geological Section of the Museum, has added greatly to the interest and the value of the work done in Geology *B*. A considerable number of photographic enlargements, and of new weather maps, the latter enlarged for lecture purposes and illustrating special weather types, has been added to the teaching collection. Special attention has been paid to securing photographs and lantern slides of meteorological phenomena of recent occurrence. The collection of slides for use in the courses in Meteorology and Climatology is now well supplied. During the year two investigations carried out by students in the course Geology 20*e* (Advanced Climatology) have been published, as follows: "Mean Monthly and Annual Relative Humidity Charts of the United States," by Kenneth S. Johnson, '07, in the Report of the South African Association for the Advancement of Science, 1906, 161–168; "Fog on the Newfoundland Banks," by C. T. Brodrick, '07, in the Monthly Weather Review, Vol. 35, 1907, 76–78. Professor Ward has completed the manuscript of his new book, "Climate," for The Science Series.

Professor Woodworth reports that with Professors Davis and Wolff he gave the lectures to the class in Geology 4, the laboratory and field work of which was carried on, under his guidance, by Messrs. Eggleston, Lahee, and F. H. Sawyer. It is felt by the instructors and the students in this course that the field parties should be split up into smaller groups. For some years these field parties have included 32 students, too many for the effective instruction which one man can give. All the available force which we have been able to command has been devoted to this work. Were the number of students reduced to 10, as is now the case in Course 5, a great gain would be made. To accomplish this reduction would require an increase in the number of assistants in Geology 4 during October and November from two men to six. It is probable that temporary field aids drawn from the graduate and other advanced students in geology could be provided for this work at a cost of $140. Course 5, in the elements of historical geology, was given for the second time, with the assistance of Mr. Eggleston and the additional aid of Dr. Mansfield and Mr. Lahee in the field. The field localities chosen for this course lie as far away as Attleboro and Worcester, requiring an additional expenditure for transportation about equal to the fee of the course, but we believe the instructive quality of the localities amply repays the expenditure. Course 8 was given, as last year, with the aid of Dr. Mansfield in the field work. Course 16 was repeated as in former years, without personally guided field excursions. While this method of conducting field work is better for advanced students of a decided geological aptitude, it is doubtless true that many students who elect this course do not obtain that knowledge of the subject which they would have were they personally attended by an instructor in the field. One student in Course 20*c* completed the mapping of the felsites and basic flows south of North Attleboro, and a paper embodying a considerable advance in our knowledge of these subjects has been prepared for publication.

The teaching collection has been enriched by gifts of rocks from Tennessee by Mr. Chester W. Washburn; of rocks from the upper Mississippi Valley by Mr. W. N. Johnstone, '09; of rocks from Colorado by Mr. J. W. Eggleston, and several minor accessions.

During the April recess Professor Woodworth conducted a party from Course 5 to the Yorktown section in Virginia.

An additional storage case was built and placed in the hall. A reading desk composed of olivine basalt in the form of a *metate*, or native Mexican corn mill, with its hand roll, or *metapile*, was brought from Mexico by Professor Woodworth and installed in the Geological Laboratory. An enlarged photograph of Professor Shaler by Pach has been placed in the Geological Laboratory. Several instructors from other universities have, during the year, visited this laboratory and indicated their intention of embodying certain features in laboratories about to be constructed, as at Princeton, Columbus, Ohio, etc.

Professor Woodworth continued his connection with the New York State Geological Survey and has completed a map and report on the pleistocene geology of the Schuylerville quadrangle, including the major part of the battlefield of Saratoga. In July, 1907, he took part in conducting members of Section E of the American Association for the Advancement of Science to various points of interest between Covey Hill, Canada, and the Ausable Chasm.

Mr. Eggleston spent five days in September, 1906, in an examination of the syenite at Cuttingsville, Vt.

Professor Johnson reports that the summer of 1906 was spent in conducting a geological excursion through portions of New Mexico, Arizona, and Utah. The excursion was supported in part by an allotment of funds from Harvard University and a similar grant from the Massachusetts Institute of Technology. After making an examination for the Atchison, Topeka, and Santa Fé Railway Company of the underground water resources along a portion of their line in New Mexico, and studying the volcanic features of the Mount Taylor district in the same territory, the party proceeded to Prescott, Arizona. From this point a wagon trip of fifteen hundred miles was made through the Grand Canyon district of Arizona and the Basin regions of Arizona and Utah, the excursion terminating at Salt Lake City.

During the winter considerable time was devoted to the preparation of articles based on the summer's work. The following subjects were treated: the volcanic necks of the Mount Taylor region, the faults and folds of the Grand Canyon district, recent volcanic activity in the San Francisco mountains, and physiographic features along the western margin of the High Plateaus of Utah. Reports on the volcanic necks of the Mount Taylor region were presented at a meeting of the American Academy of Arts and Sciences in Boston

The following is a list of publications which have appeared since the last report: —

1. The Mountains of Southernmost Africa. By W. M. Davis. *Bull. Amer. Geogr. Soc.*, XXXVIII, October, 1906, pp. 593–623.

2. The Physical Factor in General Geography. By W. M. Davis. *Educational Bimonthly*, I, 1906, pp. 112–123.

3. Professor Shaler and the Lawrence Scientific School. By W. M. Davis. *Harvard Eng. Journ.*, 1906, pp. 129–138.

4. Biographical Memoir of George Perkins Marsh. 1881–82. By W. M. Davis. *Biogr. Mem. Nat. Acad. Sci.*, 1906, pp. 71–80; portrait.

5. [Review of] Wright's "Scientific Confirmations of Old Testament History." By W. M. Davis. *Christian Register*, March 14, 1907; *Boston Transcript*, March 16, 1907.

6. The Place of Coastal Plains in Systematic Physiography. By W. M. Davis. *Journ. Geogr.*, VI, 1907, pp. 8–15.

7. The Terraces of the Maryland Coastal Plain. Review of "Pliocene and Pleistocene." Maryland Geographical Survey. By W. M. Davis. *Science*, May 3, 1907, New Ser., XXV, pp. 701–707.

8. Report on a Geological Excursion through New Mexico, Arizona, and Utah, Summer of 1906. By D. W. Johnson. *Technology Quart.*, XIX, December, 1906, pp. 408–415.

9. Drainage Modifications in the Tallulah District. By D. W. Johnson. *Proc. Bost. Soc. Nat. Hist.*, XXXIII, February, 1907, pp. 211–248, pls. 27–28.

10. River Capture in the Tallulah District, Georgia. By D. W. Johnson. *Science*, March 15, 1907, New Ser., XXV, pp. 428–432. Separate, 10 pp.

11. A Recent Volcano in the San Francisco Mountain Region, Arizona. By D. W. Johnson. *Bull. Geogr. Soc. Phil.*, V, July, 1907, pp. 6–11, 2 pls.

12. Volcanic Necks of the Mount Taylor Region, New Mexico. By D. W. Johnson. *Bull. Geol. Soc. Amer.*, XVIII, July, 1907, pp. 303–324, pls. 25–30.

13. Reviews in *Amer. Nat. Science and Bull. Amer. Geogr. Soc.* By D. W. Johnson.

14. The Origin and Structure of the Roxbury Conglomerate. By G. R. Mansfield. *Bull. Mus. Comp. Zoöl.*, XLIX, November, 1906, pp. 89–271, 7 pls.

15. The Characteristics of the Zones. By R. DeC. Ward. I. The Tropics. *Journ. Geogr.*, V, September, 1906, pp. 302–319. II. The

Temperate Zones. *Loc. cit.*, October, pp. 337–353; November, pp. 375–405. III. The Polar Zones. *Loc. cit.*, December, pp. 433–450.

16. Changes of Climate. By R. DeC. Ward. *Popular Sci. Monthly*, LXIX, November, 1906, pp. 459–470.

17. Les Changements du Climat. By R. DeC. Ward. *Ciel et Terre*, XXVII, January, 1907, pp. 559–567; February, pp. 617–631.

18. Notes and Reviews in *Science* and in the *Bull. Amer. Geogr. Soc.* By R. DeC. Ward.

19. A 1671 Version of Nicolaus Steno's De Solido Intra Solidum Naturaliter Contento, by H. O. By J. B. Woodworth. *Science*, May 10, 1907, New Ser., XXV, pp. 738–739. Separate, 3 pp.

20. Postglacial Faults in Eastern New York. By J. B. Woodworth. *Bull. 107 N. Y. State Museum*, 1907, pp. 5–28.

J. B. WOODWORTH, *Chairman.*

THE DIVISION OF MINING AND METALLURGY.

To the President of the University: —

Sir, — At the beginning of the academic year 1906–07 twenty students were enrolled in the programme of Mining and Metallurgy in the Lawrence Scientific School. The table below gives the corresponding numbers, as well as the total registration in the Scientific School and the percentage of mining students, for each year since 1897.

	'97–98	'98–99	'99–00	'00–01	'01–02	'02–03	'03–04	'04–05	'05–06	'06–07
Students in Mining and Metallurgy .	17	19	30	42	67	75	68	67	68	20
Students in the L. S. S.	410	415	495	507	549	584	548	530	504	204
Per cent.	4.1	4.6	6.1	8.3	12.2	12.8	12.6	12.6	13.4	9.8

In addition to the men in the Lawrence Scientific School three mining students were enrolled at the beginning of the year in the Graduate School of Applied Science and one in the Graduate School of Arts and Sciences. Before the end of the year the number in the Graduate School of Applied Science had increased to six.

The great falling off in the number of mining students in the Scientific School, as well as in the total number of students, was due to the registration of new students, both regular and special, in Harvard College and to the transfer to Harvard College of students already in the School. This movement was the inevitable result of the establishment of the degree of S.B. in Harvard College; and since it was necessary to the speedy development of the new Graduate School of Applied Science, the whole weight of our influence was thrown in its favor. It is to be understood therefore that these figures do not mean any material falling off in the total number of men studying Mining. Statistics collected by the Mining Club, a students' organization, indicate that the number of such men was about the same as in the preceding year.

Occupations and Earnings of Graduates.

Mining is a basic industry like Agriculture. But unlike Agriculture it cannot be carried on, except in rare cases, by individual effort. It requires associations of men and capital, complex organizations with officers of various grades, and a minute subdivision and specialization of effort. This Division is endeavoring to train men for places in this highly organized industry. How are we succeeding?

In the long run our success must be measured by the success of our graduates, — that is to say, by the readiness with which they obtain a foot-hold in the mining industry, and the work they do in it. The time which has elapsed since the course was established has been too short to enable us to judge fairly as to the position which our graduates are likely to attain. Nevertheless the results of an inquiry carried on last spring have a bearing on this question and may be stated here.

The first man to take the degree of S.B. in Mining and Metallurgy in the Lawrence Scientific School, after the beginning of our work in 1895, was graduated in 1897. In the ten years which have since elapsed a considerable number of men have taken the degree and have subsequently engaged in mining work. It seemed desirable and valuable at the end of this first ten-year period to find out, if possible, what these men had accomplished since graduation. The investigation was accordingly undertaken by writing a personal letter to every man who had been out of college at least one year, — that is to say, to graduates of all classes down to 1905 inclusive.

Down to 1906 the number of men who had received the degree of S.B. in Mining and Metallurgy was 38, as follows: 1897, 1; 1898, 0; 1899, 2; 1900, 2; 1901, 3; 1902, 7; 1903, 12; 1904, 4; 1905, 7. Besides these 38 men five others have completed the work of the Mining programme and have taken higher degrees in the Graduate School, — A.M. or S.M., but not the S.B. They are counted as graduates of the Division. Of the class of 1905, three men continued their studies at Harvard during the year 1905–06; also five graduates are known never to have engaged in Mining work, and one man is dead. After the addition and deduction respectively of these names, 34 graduates are left who are known to have been engaged in Mining or Metallurgy, and to them the inquiry was confined. Information has been received from 26 men, or about 70 per cent. of the whole number. Of the eight men not heard from, one is reputed to be very successful, and two others are believed to have

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done as well as the average. The occupations of the 26 men are as follows: —

Mine Superintendent	11	Metallurgist	2
Mining Engineer	6	Teacher of Metallurgy	1
Examining Engineer	3	Metallurgical Supplies	1
Mining Geologist	2		—
		Total	26

Geographically the men are located as follows: —

Middle Atlantic States	6	Southern States	1
Lake Superior region	3	Central America	1
Western States	8	Cuba	1
Mexico	5	Corea	1

The earnings of the men reporting are as follows: —

Average for the first year after graduation	$958
General average for the current year	2390
Earning over $5000 a year	2 men
" $4000–$5000 a year	2 "
" 3000– 4000 "	2 "
" 2500– 3000 "	3 "
" 2000– 2500 "	8 "
" 1500– 2000 "	6 "
" 1000– 1500 "	3 "

The results shown in these tables are encouraging as far as they go. They show that nearly ninety per cent. of our graduates are continuing in the work for which they were trained, and that a fair proportion of them have already reached executive positions of responsibility. As regards earnings, when it is considered that the average age of these men is about twenty-seven years (the oldest being not yet thirty-four), and that they have been at work on the average only a little more than four years, it is clear they have done well, — probably decidedly better than the average young doctor or lawyer, and unquestionably better than the average young graduate in other branches of Engineering.

New Courses.

Four new courses were added to our programme last year, and Course 5 was lengthened from a half-course to a full course. The new courses are as follows: —

Course 16, a half-course in the first half-year, is intended as an introduction to Mining and Metallurgy. In this course Professor Peters proposes to set forth the fundamental principles on which the practice of Mining and Metallurgy is based, the history of these arts, and their relation to the development of civilization. This course is treated with as few technical details as possible, the object being to make it of such general interest that it may profitably be taken by students of Economics, as well as by men who intend to follow a business career. It is hoped also that this course will prove of value to the Division by making its work better known to the general body of students.

Courses 21, 25, and 27 are half-courses in special subjects, and are particularly designed to meet the needs of graduate students, and to open the way for greater freedom of election in graduate work. Course 21 by Professor Raymer deals with Mining Machinery. Course 25 by Professor Smyth deals with Magnetic Methods of Prospecting, and Course 27 by Professor Sauveur deals with Blast Furnaces and their Products. It is expected that some of these courses at least will be offered only in alternate years.

No changes in the number of assistants or in the personnel of the teaching force have been made during the past year.

LECTURES, ETC.

The useful gift made by the Visiting Committee to this Division in 1906, which was mentioned in my last report, has enabled us greatly to extend the system of short courses of lectures on special topics by experts. In December, 1906, Mr. Robert Van Arsdale Norris of Wilkes-Barre was appointed Lecturer on Coal Mining and gave ten lectures on this subject in January. Mr. Norris has had much experience in the mining and marketing of coal, and his very interesting lectures supplemented in a most useful way the routine work of the Division. It is hoped that his connection with us may be continued and its scope enlarged.

Mr. Woolsey McAlpine Johnson gave in March two valuable series of three lectures each on Present Practice in Electro-Metallurgy and Concentration and Smelting of Zinc Ores.

In March, Mr. S. T. Nelson, of the Sullivan Machinery Company, gave two lectures on Hoisting Engines, and Mr. T. L. Dee, also of the Sullivan Machinery Company, gave one lecture on Diamond Drilling. The long experience of these gentlemen and their broad and practical knowledge of their subjects made their lectures especially acceptable to our students.

The instructors in the Division continued to engage, as far as their duty to the University permitted, in professional work.

Mr. E. E. White made trips to the Sterling Salt Mine in Central New York and to the lead district of Southeastern Missouri. Mr.

H. M. Boylston visited metallurgical establishments in Pittsburg and Buffalo. Dr. George R. Mansfield had charge of one of the summer field courses in Geology in Montana and later assisted Professor J. E. Wolff in geological field work in the Crazy Mountains. Professor C. H. White was engaged during the year in perfecting his colorimeter. He spent part of the summer in the recently developed mining districts of Nevada. Professor Sauveur continued his consulting work, and also has been engaged in writing a book on the *Metallurgy of Iron and Steel*, which he plans to make the first of a series to be published under the general title of *The Iron and Steel Encyclopedia*. Professor Peters has continued his consulting work. His book on the *Principles of Copper Smelting* appeared in April. Professor Smyth has engaged in consulting work. He made several trips to the Lake Superior iron region where also, as in preceding years, he spent the summer.

As usual, the Division has actively interested itself in finding places for its graduates, not only of the current year, but of preceding years as well. Men who are out of a job or who wish to better themselves naturally write to us to see if we know of a vacant position, and those who know of vacant positions write to us for men to fill them. In this way our men are learning that our interest in them and our possibility of being useful to them do not cease at graduation. Thus for our own graduates we do much the same work that the Appointments Office is doing for the College at large. During the year positions (including work for the summer) were found in mines and metallurgical establishments for eleven men at salaries ranging from $3,600 down. In addition three men were appointed to assistantships on the recommendation of the Division.

The Department was made a Division during this year.

NEEDS OF THE DIVISION.

The chief needs of the Division were fully set forth in my last report. These needs still exist and may briefly be stated again as follows: —

1. Enlargement of the Rotch Building in order to provide an additional lecture room, laboratories, library, reading-room, and museum. The additions and changes as planned will cost approximately $30,000.

2. A small mine, not too far from Cambridge, which might be equipped and run during the summer as a mining laboratory. It is believed that a suitable property could be secured and equipped for a small sum.

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MINERALOGICAL MUSEUM AND LABORATORIES OF MINERALOGY AND PETROGRAPHY.

To the President of the University: —

Sir, — The usual courses of instruction were given and were well attended. Mr. Ralph W. Richards, assistant in the Department for the last two years, was appointed to the U. S. Geological Survey, and Mr. H. E. Merwin will be assistant for the coming year. The need of a permanent mechanical and clerical assistant for the Museum and laboratories, explained in the last report, has been met by the appointment of Mr. G. R. Flint, whose services are shared with the Department of Geology.

The instrumental equipment has been improved, through the generosity of a friend, by the addition of two lathes, at a cost of $600, for sawing and grinding sections of minerals and rocks. One of these holds the object to be cut against the edge of the diamond-charged saw in a set of jaws which can be revolved in three different planes through measured arcs, permitting the cutting of oriented sections at predetermined angles.

The collection of minerals has received many accessions, including several rare and valuable specimens purchased in part by gifts of money from anonymous friends. One of these, which will delight visitors to the exhibition rooms, is a great mass of deep purple amethyst crystals, three feet long by two wide by one deep, presenting a curved surface containing some five hundred large and perfect crystals. It was sent to Germany from Brazil for cutting purposes and rescued from that fate by a prominent mineral dealer who held it for our Museum. Professor T. Wada of Tokyo sent (partly in exchange) a set of interesting Japanese minerals, which were supplemented by others collected in Japan for the Museum by Mr. G. Frazar.

Mr. J. W. Eggleston, a graduate student in Geology, has been engaged in the study of the syenite stock of Cuttingsville, Vt. The Curator spent most of last summer in the Crazy Mountains of Montana, engaged in reviewing the geology and petrography in preparation for a long deferred monograph. He was assisted by Mr. H. E. Merwin and for some time by Dr. G. R. Mansfield, who conducted the Summer School of Geology there in the earlier season. The two parties worked together for three weeks. Several new features were observed, including a small glacier in the recesses of one of the cañons. A large number of specimens were collected and about three hundred photographs taken.

JOHN E. WOLFF, *Curator.*

THE PEABODY MUSEUM OF AMERICAN ARCHAEOLOGY AND ETHNOLOGY.

To the President of the University: —

Sir, — In preparing this, the forty-first report on the Peabody Museum, I am deeply impressed by the changes that have taken place during two score years, and the consequent broadening of the scope of the Museum. When George Peabody, in 1866, gave $150,000 for the purpose of establishing a museum of American archaeology and ethnology and a professorship for the teaching of these subjects, an important and far-reaching foundation was laid. But those were days of small beginnings, and archaeology and ethnology were hardly ranked as subjects of scientific research. A museum which should have for its object the collection and preservation of material relating to the present Indian tribes and their predecessors in America was then supposed to have narrow and well-defined limits. Just as Harvard College has grown into a university, so has this museum developed from its original limited object into a museum and school of anthropology. It has become the Anthropological Section of the University Museum and an essential factor in the Division of Anthropology under the Faculty of Arts and Sciences. Thus, while the Peabody Museum, as conceived by its founder, should be and must be the principal part of the museum for all time, it cannot be limited to its original object. Its large collections from various parts of the world, together with the broad scope of the plan of instruction in the Division of Anthropology, illustrated by these collections, have made it distinctly a Museum of General Anthropology.

The increase of the collections through the activity of the Museum in many lines of research, particularly in explorations in North, Central, and South America; the large collections coming to it through the personal explorations and interest of graduates and friends of the University; the publication of the Papers and Memoirs of the Museum; the growth of its library into one of unusual importance for anthropological research; and the constant use made of the Museum and its library by teachers and students, all call for a more adequate endowment, and for the immediate completion of the south wing of the University Museum building.

This addition to the building would furnish the needed room for placing on exhibition the many thousand valuable specimens now in storage, and would enable me to perfect the plan for the arrangement of the Museum so that it shall be an exponent of the life and history of man from the primitive state through savagery and barbarism to the beginnings of civilization. It would also furnish the additional space required for the Anthropological Library; for a lecture room to accommodate students in the several courses now given in the Division; for the laboratory used by graduates who are carrying on researches; for work-rooms needed in the preparation and cataloguing of specimens, and for the administrative work of the institution. All these are imperative needs that our present building cannot supply. When the second section of this building was completed it made one half of the south wing of the University Museum. There is now remaining a space of one hundred feet reserved for the extension of the Peabody Museum, between the blank wall of this wing and that of the southern corner of the main structure of the University Museum. The completion of this wing would finish the University Museum building as planned by Agassiz fifty years ago. How much would be done for anthropology in America if this great store-house of invaluable collections, which future generations can never duplicate, could thus secure the space assigned to it for present and future expansion. What an appropriate memorial it would be at this time, one hundred years after the birth of Agassiz, if some friend or friends of the University would furnish the means for carrying to completion this grand scheme which Agassiz conceived and for which he worked so successfully during his life!

Notwithstanding the crowded state of the halls and cases, several interesting exhibits have been added during the year. These were made possible by the kindness of Mr. Augustus Hemenway who furnished the means for building a large new case to take the place of the platform in the hall formerly used in part as a lecture hall. This additional case provided room for the exhibition of many objects relating to the Indian tribes of North America, and afforded the Assistant Curator an opportunity to make a more systematic arrangement in the North American Indian Hall and Gallery. Several small cases have been added to these rooms in order to place on exhibition a number of lay figures showing Indian costumes, and several groups illustrating the customs of certain Indian tribes as exemplified by their habitations and domestic life. These lay figures and miniature groups of habitations have been made under the personal supervision of Mr. Willoughby. They are an important feature in an ethnological exhibit, and it is my hope that we shall in time be able to illustrate the distinct costumes and habitations of all the native peoples, particularly of the North American Indian tribes.

The exhibition of several new collections and of others taken out of storage has been accomplished by eliminating from several of the cases such specimens as could be spared without detracting from the importance of the exhibit as a whole. The specimens taken from the cases have been placed in drawers where they are readily accessible.

The limitation of exhibits is a matter that every curator of a museum has to contend with. Many discussions on this subject have taken place during the past few years and several papers have been published relating to the principles involved in the arrangement of public museums. These discussions have been based on the obligations of a museum to the public which supports it, thus the principle necessarily differs from that of a university museum, in which the primary object is to furnish the means for comparative study, by an arrangement of synthetic, systematic, and geographical exhibits. This arrangement makes the collections of importance to students as well as of educational interest to the general public.

In the Anthropological Section, the geographical and ethnographical system has been followed, so that the student has certain naturally limited groups to study and compare, both in archaeology and ethnology. These groups are made as complete as possible in order to present as a whole the archaeology of a special region, and the customs, art, and costumes of each tribe or people represented. In this way all that it is possible to glean of the life history of man from specimens of his handiwork and from exemplification of his achievements is shown in the various exhibits. The story of his past and of his condition in savagery, in barbarism, and in the beginnings of civilization, is illustrated. In the somatological collections the opportunity is afforded for a comparative study of the physical characteristics of the various races.

An exhibit of exceptional interest and importance, secured through the generosity of Miss Mary L. Ware, is that of the reduced copies of the mural paintings of the Temple of the Tigers at Chichen Itza, Yucatan. These paintings, showing the frescoes as they exist on the four sides of the upper chamber of this temple, have been framed and suspended over one of the long table cases in the Central American and Mexican Hall. They are fine illustrations of the pictorial art of the ancient people who built the huge stone structures of Yucatan. For these accurate copies of the old frescoes archaeologists are deeply indebted to Miss Adela C. Breton, who made several visits to Yucatan for the purpose of making facsimiles of the originals.

In addition to her gifts mentioned in former reports, Miss Breton has given to the Museum two of her colored drawings of portions of the bas-relief of the lower chamber of the Temple of the Tigers. She has also generously colored several plates in our copy of Maudslay's work on the ruins of Chichen Itza, from the copies she made of the colors still remaining on a number of the sculptures. These colored pictures furnish, to those who have not visited the ancient buildings of Yucatan, much that is new in relation to the customs and life of the people who reached the highest stage of art in North America in prehistoric time.

The largest of several important collections received during the year is the gift of Mr. Thomas Barbour (A.B. 1906). It comprises articles of dress and personal ornament, weapons, household utensils, figure heads of canoes, charms, effigy idols and other objects collected by Mr. and Mrs. Barbour from the tribes of Dutch New Guinea during their expedition of 1906–07. The principal localities represented are Doreh (Manokwari), the region made famous by the collections in natural history of Wallace and d'Albertis; Djamna, in the Tanah Merah; and Toebadi, at Humboldt Bay. These localities are on the northern coast of New Guinea. Collections were also obtained from Jendee, on Roon Island; from Pom, Wooi, and Ansus, on Jappen Island; and from Meos-boendi, on Wiak Island of the Schouten group. These islands are in Geelvink Bay near the northwestern end of New Guinea. Mr. Barbour took several hundred photographs of the natives and of their houses and villages, and he has generously given a set of these photographs to the Museum. Although the Museum possesses a fairly good collection from the Papuan Gulf district (British New Guinea), the region visited by Mr. Barbour was practically unrepresented in our ethnological exhibits. A collection consisting of weapons, baskets, mats, boxes, and fire implements from the Alfuros of Halmahera (Gilolo), was brought to us by Mr. Barbour as a gift from Capt. G. J. J. deJong, the military commandant of Halmahera.

Mr. Lewis H. Farlow, who during the past five years has given many valuable specimens illustrating the ethnology of our Indian tribes, has continued his contributions and has sent to the Museum a large collection from the Hupa and Yurok tribes of the Trinity and Klamath rivers of northern California. Other recent gifts from Mr. Farlow are twelve rare baskets from the Chilcotin Indians of British Columbia, an Athapascan tribe whose culture in some respects approaches that of the Salishan people of Fraser and Thompson rivers; three very old Tlingit baskets found in the family of a Hudson Bay Company trader; an unusually fine basket from the Inyo-Kern region of California; baskets and other objects from the Karok, Pit River, Pomo, Panumit, Moquelumnan, Mission, and other Indians of California; a collection of very old Navajo baskets, showing the different designs, from Arizona and New Mexico; ceremonial and domestic articles from the Kwakiutl tribes of British Columbia; and a Pomo ceremonial robe of bear-skin, with accessories, from California. These collections, with the other material received in former years from Mr. Farlow, have been installed in the hall and gallery containing the exhibits relating to the tribes of North America.

Dr. L. C. Jones of Malden has contributed to the Museum many specimens from various countries. This year his gifts of special importance are: Finely wrought ceremonial axes of iron from the province of Kassai, Congo Free State; a drum, a native harp and a model of a canoe from the province of Uganda; and a Warree gaming board from Mendeland, Africa; ornaments from New Guinea; ancient fish-hooks from the Pacific Islands; Hupa woman's hat; a Makah Indian basket; pottery and a clay effigy from the pueblo of Cochiti, New Mexico. He has also given stone implements from New Brunswick, Maine, Pennsylvania, North Carolina, Mississippi, and New Mexico.

Mr. Clarence B. Moore, who always remembers the Museum when on his expeditions, has sent to us two pottery vessels, having incised decorations, from Moundville, Alabama; also a shell pick or hoe, mounted on a wooden handle to show the probable method of hafting similar implements, from the southwest coast of Florida.

The Museum of Comparative Zoölogy has transferred to this Museum twenty-two masks in plaster of the natives of Africa, the Pacific Islands, and the Malay Archipelago.

From the Egyptian Exploration Society, through its Secretary, Mrs. Cornelius Stevenson, we have received forty-five specimens of Egyptian pottery from Ballas, Nagada, Hu, and Gurob.

Dr. Charles Peabody has given a series of chipped flints from the tertiary deposit at Otta, Portugal, — examples of what some archaeologists consider to be the work of man; specimens representing the supposed eolithic culture from environs of Mons, Belgium; others from the palaeolithic sites of La Moustier, Solutre, and La Madeleine, France; animal bones and chipped flints from neolithic sites in France, Denmark, and Switzerland. These specimens were collected by Dr. Peabody during his recent trip to Europe.

Other additions to the collections received as gifts are: From Professor Arlo Bates, two crania and other portions of skeletons from a shell-heap at Frenchman's Bay, and from another at West Gouldsborough, Me.; Mr. Samuel D. Hannah, stone pestle from Barnstable County, Mass.; Mr. A. M. McCulloch, an old dugout canoe of Indian type found about fifty years ago in the mud of a pond in Otis, Mass.; Professor J. B. Woodworth, grooved stone sinker from Martha's Vineyard, and pottery heads from Teotihuacan, Mexico; Mr. Owen Bryant, a representative collection of stone implements and utensils from the shores and islands of Notre Dame Bay, Newfoundland; Mr. J. W. Hastings, pottery cup from Zimatlan, Oaxaca, Mexico; Mr. R. G. Fuller, an unusually fine ceremonial adze from the Hervey Islands, obtained in Mexico during the Mexican war, also a paddle from the coast of Guinea, Africa; Mr. H. A. Wright, a pottery cup from an Indian grave on Long Hill, Springfield, Mass.; Mr. K. F. Brill, chipped knives from Maryland; Mr. Irwin Hayden, a chipped implement from Winthrop, Mass.; Mr. Eben F. Putnam, a hammer-stone, chipped knives, and fragment of a soapstone pot from Indian village site, Wellesley Farms, Mass.; and stone sinkers from a shell-mound, Ellis Landing, San Francisco Bay, Cal.; Dr. G. W. Nash, a large Iroquois pottery jar found while excavating a cellar at Hurley, N.Y.; Mrs. F. W. Putnam, belt made by a Navajo woman; Miss C. A. Benneson, examples of early printing from Japan, China, and India; Dr. W. McM. Woodworth, two native belts worn by men in the Marshall Islands; Mr. C. C. Willoughby, a wallet of native flax from New Zealand; Rev. Père Pacifique, a quill-ornamented box of the Micmac Indians; Baron Atashi Kitagaki, Kyoto, Japan, through Mr. J. H. Gardiner, two stone axes from the island of Hokkaido, Japan; Señor Alvaro Gil de Almeida, a bow and seven poisoned arrows and a notched bamboo arrow from the Canamarys Indians of the Upper Purus river, Brazil; Professor R. Pumpelly, wheat from an Egyptian tomb; Mr. T. Maler, chipped flint implements from Tikal and Naranjó, Guatemala; Dr. A. M. Tozzer, ancient pottery mould for making terra-cotta images from Chiapas, Mexico; Dr. J. C. Phillips, several crania, pottery vessels, stone and bone implements, pendants, and beads of shell and turquoise and other stone, shell bracelets and other personal ornaments from mounds near Ramos, State of Chihuahua, Mexico; Mrs. E. R. Emerson, an interesting lot of stone implements from an Indian burial-place on the western bank of the Kennebec river, at

Waterville, Me.; Mr. H. S. Forbes, charms and a silver image made and worn by the Igorots of the Philippine Islands; Mr. S. G. Morley, potsherds from the ancient pueblos of the Rio Grande Valley, New Mexico.

Our collection of photographs has been enriched by the following gifts, in addition to the large series from Mr. Barbour: —

From Dr. Alexander Agassiz, thirteen photographs of American Indians; Mr. J. M. Wulfing, photographs of six remarkable objects in repoussé copper found in Dunklin County, Mo.; Dr. Roland B. Dixon, fifty-seven photographs of the ruins and peoples of India and other sections of Southern Asia; Dr. A. C. Hadden (as an exchange), fifty-four lantern slides of the natives of New Guinea.

In 1882, 105 oil portraits of Indians were received from the heirs of E. P. Tileston and Amor Hollingsworth. These are the portraits which were used largely as the originals of the plates in the folio volumes of McKenney and Hall published in 1836. They are mostly copies by Henry Inman of the original paintings by C. B. King which were destroyed by fire in the Smithsonian Institution in 1865. At the time of the gift several other portraits of this series were known to be in Boston houses in the keeping of members of the two families. Recently Mrs. Cornelius Dexter has kindly presented one of these portraits to the Museum through the hands of Mr. Horace E. Ware.

We have received an interesting painting from the Trustees of the Boston Athenaeum, through the suggestion of Miss Irene Weir, a descendant of the artist. The painting is signed Robert W. Weir, West Point, 1839, and was purchased by the Athenaeum in 1860. At the right is a soldier in Spanish costume who seems to be pleading for the Indian whose figure forms the centre of interest in the picture.

The income of the Huntington-Frothingham-Wolcott Fund has been used for purchasing specimens illustrating the arts and customs of the Eskimo of Cape Vancouver, the Iroquois, Ojibwa, Apache, Pima and Zuñi Indians of North America, the Surinam tribes of South America, and the Igorot and Negrito of the Philippine Islands; and for shields and clubs from Africa. It has also been used for making a miniature habitation group of the Plains tribes, and for life-size lay figures of a Northwest Coast man and a Nootka and a Hupa woman for the display of costumes; and for the models of the figures in the Siouan group. A portion of the income was also applied to defray in part the expenses of the expedition to the Nez Percé country under the direction of Dr. Dixon.

The income of the H. C. Warren Exploration Fund was used for the further exploration of the ancient cemetery site on the Ferris estate in Ohio bequeathed to the Museum by the late Miss Phoebe Ferris.

In addition to the income of these two funds, so important to the work of the Museum, we have had the annual gifts of $500 from Mr. Clarence B. Moore, $25 from Mrs. N. E. Baylies, and $100 from an anonymous friend. These gifts have been used for the exploration in the Delaware valley and on the Ferris estate. We also received an anonymous gift of $365 for the Nez Percé exploration; another anonymous gift of $25 for making diagrams needed in the lectures to the students; and $100 from Professor H. W. Haynes for the purchase of special books needed in the Museum Library.

The income of the Susan D. Warren Fund has been applied to the cost of the cases in the Indian Gallery.

The most extensive ethnological expedition ever started by the Museum is the South American Expedition which is under the patronage of a recent graduate of the University, as stated in the report of last year. This expedition has received additional support from another recent graduate who generously adds $50 a month toward the expenses. The field work is under the charge of Dr. W. C. Farabee. The party consisting of Dr. Farabee, accompanied by Mrs. Farabee, Mr. de Milhau, Mr. Hastings, and Dr. Horr, reached the headquarters in Arequipa, Peru, early in February last. From this place the gentlemen made several trips, on one of which they witnessed an Aymara festival. On March 8, they left Arequipa and crossed the Andes to the Tombopata river, where they arrived about the middle of August. They returned to Arequipa by a different route early in September, when Mr. Hastings returned to Cambridge. The other three members started on a trip to Cuzco. This preliminary trip of six months in that little-known region furnished many opportunities to study several Indian tribes and to make important ethnological and other scientific collections. Mr. de Milhau is to return in January, and Dr. Farabee and Dr. Horr are to make another trip into the interior, on their return from the Cuzco valley. Everywhere the expedition has been well received both by government officials and by individuals. The officers of the Inca Mining Company have been untiring in giving assistance and in furnishing transportation over their extensive routes both on land and by river boats.

In Central America, Mr. Teobert Maler has been engaged in preparing his reports on his explorations under the Committee of Central American Research. We have received his reports of the explorations at the ruined cities of Altar de Sacrificios, Seibal, Ilsimté-Sácluk, and Cankuen. These have been translated from the German, and are now in process of publication. They will be followed by his descriptions of other ruins which he visited during his later expeditions. This series of reports will make another large volume of the Museum Memoirs containing many instructive plates of the structures, sculptures, and hieroglyphic inscriptions.

Mr. E. H. Thompson has continued his researches at Chichen Itza in Yucatan and has sent to the Museum a number of moulds and photographs of the sculptures and hieroglyphic inscriptions that he discovered in the ancient ruins. His report on this work when completed will form another Museum Memoir. This research has been carried on under the direction of the Committee of Central American Research.

Under the immediate guidance of Dr. R. B. Dixon, Mr. H. J. Spinden, Austin Teaching Fellow in Anthropology, and Mr. R. R. Hellman (A.B. 1906) made an expedition to the Nez Percé country for linguistic, general ethnological and archaeological research. Unfortunately, Mr. Hellman was disabled by sickness. Mr. Spinden was successful in his researches and in his study of the Nez Percé language. He brought back important linguistic material for study, including an extensive Nez Percé vocabulary with illustrations of the grammatical construction of the language, and twenty Nez Percé myths, some of which are in the native text. He secured a collection of rare ethnological objects, including a necklace, made of deer hoofs, which formerly belonged to one of the Indian guides of Lewis and Clark. He also made a small archaeological collection.

Mr. V. Stefansson, who had been an Assistant in the Division, joined the Anglo-American Polar Expedition to the western arctic regions, in the spring of 1906, as Ethnologist of the Expedition. When starting on this expedition Mr. Stefansson was supplied with a small fund with the understanding that he should collect such objects as he could. In the winter of 1906–07 he was able to make a study of the language and customs of the Eskimo. He explored Eskimo sites on Herschel Island near the mouth of the Mackenzie River, on Flaxman Island on the arctic coast of Alaska, and on one of the Jones Islands at the mouth of the Colville River.

Mr. R. E. Merwin, Graduate Student and Hemenway Fellow for 1907–08, — assisted for part of the time by Mr. Irwin Hayden, also Graduate Student and Hemenway Fellow for 1907–08, — has given his time from June to November to the exploration of the ancient cemetery and village site on the Ferris estate in Madisonville, Ohio.

During this exploration many objects of importance have been discovered which will aid in the elucidation of this interesting site where so much work has been done under the auspices of the Museum since 1881. Mr. Merwin has taken the study of this site, with the large collection of specimens found there, for the subject of his thesis for the degree of Ph.D. Next summer he will finish the exploration of this land which was bequeathed to the Museum for that purpose. He is thus having exceptionally good opportunities for field work and for increasing the already rich material for his thesis.

The exploration of the glacial deposits and Indian sites in the vicinity of Trenton, New Jersey, has been continued by Mr. Ernest Volk during the past year. Several interesting discoveries have been made, and Mr. Volk will continue the work as long as the weather permits.

Mr. S. G. Morley (A.B. 1907), a student in the Division, spent February and March, 1907, in Yucatan visiting the ruins there, preparatory to entering that field of archaeology as a life work. In addition to the well known groups of Chichen Itza, Labna, and Kabah, he visited some of the smaller and less generally known sites: Sayil, notable for a large three-story structure containing over one hundred rooms, Xcoralche, Kuihuic and Acanceh. At Acanceh, — in a long room at the summit of a pyramid which was uncovered about two years ago during the process of removing stone to build a wall around the village plaza, — some very fine sculptures in stucco were discovered. This medium is rarely used in Yucatan. The figures were of animals and exhibited great strength of execution. They seemed, however, to resemble much more closely the Nahuatl sculptures than any known Maya forms. Mr. Morley's work in the field consisted in planning, mapping, drawing, describing and photographing the different ruins visited by him. He also visited the ruins of Mitta and Monte Alban. At Monte Alban there is a stela which may show Maya influence. Of this he made several photographs, which, with others from Yucatan, he has given to the Museum.

During the summer vacation Mr. Morley, with Mr. A. V. Kidder and Mr. J. G. Fletcher, students in the University, accompanied the expedition of the American Institute of Archaeology as students under the guidance of Mr. E. L. Hewett. During this expedition Mr. Hewett entrusted Messrs. Morley and Kidder with important work in connection with the exploration and mapping of the ruined pueblos in the McElmo and Mesa Verde regions in southwestern

Colorado. This work of the Archaeological Institute is under the direction of the American Committee with Mr. Hewett as Director of Explorations. These explorations will be continued and will furnish excellent opportunities for field research to our advanced students in anthropology.

In December, 1906, the Museum issued No. 2 of Vol. IV of its Papers under the title of Commentary on the Maya Manuscript of the Royal Public Library of Dresden (known as the Dresden Codex) by Ernst Förstemann: a translation from the German. This important aid to the study of American Hieroglyphs is thus made readily available to students in this country. The translation, made under the direction of Mr. Charles P. Bowditch, by Miss Selma Wesselhoeft and Miss A. M. Parker, was published through the Central American Fund. Dr. Förstemann was greatly pleased that his paper was to be published in English, and it is a sad incident that although the distinguished author was able to revise the translation, he died before receiving the first copy of the published work.

At a meeting of the Visiting Committee, appointed by the Overseers, held in the Peabody Museum in December last, Dr. R. B. Dixon, in his capacity of Librarian of the Museum, presented a statement of the condition and needs of the Museum Library. He drew attention to the fact that, through exchange with our Museum publications and by gifts of patrons, our library has now become a very important one, especially in regard to its complete sets of the serial publications of the anthropological societies and museums in various parts of the world. Since the library has no endowment, Dr. Dixon took this opportunity to make an appeal for aid in carrying on the administrative work, for purchasing special books, for binding the serials to save them from destruction in the constant use by the students, and for putting in another double row of shelves to relieve the present crowded condition. The Museum is certainly in need of a small annual income for library purposes. Under Dr. Dixon's supervision the library has been rearranged, so far as space will permit, and the shelf list is being prepared. 115 volumes and 711 pamphlets have been received during the year, principally by exchange with the Museum publications. The library now contains 3472 volumes and 2435 pamphlets on all branches of anthropology.

During the month of August Dr. Charles Peabody officially represented the Peabody Museum at the Prehistoric Congress of France at Autun and also at the International Reunion of Anthropologists at Cologne.

In the Harvard Summer School of 1907 Dr. A. M. Tozzer gave a course in Anthropology. The lectures were well attended and were illustrated by the collections in the Peabody Museum. Dr. Tozzer has prepared a Syllabus of Anthropology 1, which will also be a valuable aid to all beginners in the study of anthropology.

Through the substantial aid of a friend of the Museum and Division, a Fellowship in Central American Research has been established in the Division of Anthropology for the year 1907–08. The terms of the foundation require that the candidate shall be nominated by the Faculty of the Peabody Museum and also that "The candidate must be a student in the Graduate School of Arts and Sciences who is pursuing the study of Central American Archaeology and Ethnology. The incumbent will be required to pursue certain lines of research which seem advisable to the officers of the Division of Anthropology. The stipend is six hundred dollars." This fellowship has been awarded to Mr. S. G. Morley (A.B. 1907), who has been making a special study of the Maya hieroglyphs.

Mr. H. J. Spinden has been reappointed Austin Teaching Fellow in Anthropology for the year 1907–08; Mr. R. G. Fuller is Assistant in Anthropology and Winthrop Scholar; and Mr. R. E. Merwin and Mr. Irwin Hayden are Hemenway Fellows, for 1907–08.

In addition to the courses of special research for advanced students which are carried on in the laboratories of the Museum under the direction of the Peabody Professor, Assistant Professor Dixon and Dr. Tozzer, three full courses and three half-courses, given by Assistant Professor Dixon, and Drs. Tozzer and Peabody, are open to undergraduates during the year. Anthropology 1 is also given at Radcliffe College. Dr. W. C. Farabee has leave of absence as Field Director of the South American Expedition.

F. W. PUTNAM,
Peabody Professor and Curator of the Museum.

THE SEMITIC MUSEUM.

To the President of the University: —

Sir, — During the year 1906–07 the Museum has received the following groups of objects: —

1. Twenty-four Greek papyri and fragments from the Egypt Exploration Fund. They were found at Oxyrhynchus and el-Hibeh, and have all been published in *The Oxyrhynchus Papyri*, Parts ii–iv, by Grenfell and Hunt, or in *The Hibeh Papyri*, Part i, by the same editors. They include contracts, letters, petitions, extracts from Homer and Demosthenes, poetic fragments, and a fragment of a non-canonical gospel, and range in date from the third century B.C. to the third century A.D.

2. From Babylonia a fragmentary dispatch from Hammurabi to Siniddinam, a duck-shaped stone weight with an inscription almost worn away by long use, a large fragment of a statuette in stone, probably representing a god or a king, and an interesting stone seal which is said to have been found at Beisan in Palestine.

3. Objects illustrating modern life in Palestine, as musical instruments, household utensils, Bedouin articles, models of houses and tools, manuscripts (Arabic, Hebrew, and Samaritan), etc.

4. Articles illustrating ancient Palestine, as pottery, bronze and iron weapons, coins, scarabs, glass and alabaster vases, etc.

During the year Mr. Jacob H. Schiff made a gift of $10,000 to the Museum, which he subsequently made available for exploration, as explained below. At his suggestion and with the approval of the Museum Committee the President and Fellows appropriated $1000 of Museum money toward the purchase of a house in Jerusalem for the American School of Oriental Study and Research.

The report for 1904–05 gives an account of the gift of $5,000 by Mr. Schiff for preliminary expenses, of his further offer of $10,000 a year for five years for exploration in Palestine, and of the choice of Professor George A. Reisner as Director of the expedition. The offer was understood to be provisional, and liable to be withdrawn if the permit to dig were not secured within eighteen months. Fortified with letters of the highest authority, Professor Reisner went to Constantinople in the autumn of 1905, and made formal application for permission to dig in the ruins of Samaria. He received the cordial assistance of the American Ambassador, His Excellency John M. Leishman, and of the Director of the Imperial Ottoman Museum, His Excellency Hamdy Bey. After doing all that seemed possible at the time, Professor Reisner returned to his work in Egypt, hoping that the permit might be granted in the course of the winter. The Turkish law relating to antiquities was at the time undergoing revision, and the hope was not realized. The new law went into effect in April, 1906. In the summer of that year Professor Reisner was requested by the Turkish authorities to present a plan of the site to be excavated, and he went to Samaria to gather materials for this plan. Not long thereafter, at the request of the Harvard "Committee on Exploration in the Orient," he returned from Egypt to Constantinople, to re-enforce by his presence, if possible, the efforts in behalf of the permit. The delay at that time seemed to proceed from the local authorities in Palestine, who had not yet replied to the official question sent from Constantinople asking whether there was any reason for refusing the permit to excavate Samaria. There is reason to suppose that this reply was sent from Beirut to Constantinople in the month of October, 1906.

But the delays were so long that various members of the Committee on the Museum had begun to despair of ever getting the permit. Professor Reisner was instructed to stop expenses, and he accordingly returned to Egypt, but did not withdraw the application at Constantinople. In the spring of 1907 he was invited by the Egyptian government to accept for three years an important position in the archaeological exploration of the region which is to be flooded by the addition to be made in the height of the dam at Assuan. In the uncertainty hanging over the question of exploring Samaria, with the consent of the President of the University, he accepted the post offered him, and entered on his task in September, 1907.

In the following month the permit to dig at Samaria was finally granted. Although the permit comes a year later than the time limit set by Mr. Schiff, he has renewed his offer to provide for the expense on the terms described in the report for 1904–05. The law requires the work of exploration to begin within three months. But at the request of the American Embassy permission has been granted to postpone the work till April 21, 1908. In the rainy months, December to March, little digging can be done in Palestine. In answer to inquiry Professor Reisner has telegraphed that he could devote April and May to the work at Samaria. It is hoped, therefore, that the work of exploration may be inaugurated by him during the spring of 1908. This narrative shows the situation at the present time (December 19, 1907).

During the past five years much excavation has been done in Palestine by the English, the Austrians, and the Germans. The sites explored, Gezer, Taanach, Megiddo and Jericho, have yielded a vast amount of material, chiefly of the early or Canaanite period. Samaria, long the capital of the Kingdom of Israel, doubtless buries material of the Hebrew period, and perhaps even Assyrian letters and dispatches relating to Samaria while the place was the seat of an Assyrian governor. The exploration of Samaria is a large undertaking, but it promises so much that our plans have excited lively interest among the friends of Palestinian research.

For the year 1906–07 Professor George F. Moore served as acting Curator of the Museum. The Curator spent the year in Palestine as annual Director of the American School of Oriental Study and Research. Among the six students in that school two had studied in the Semitic Department of Harvard University.

DAVID G. LYON, *Curator.*

THE FOGG ART MUSEUM.

To the President of the University: —

Sir, — I have the honor to present the following report on the Fogg Art Museum for the year 1906–07.

Our accessions are: A painting attributed to Benozzo Gozzoli, sent us by Mr. Edward W. Forbes, '95; a copy by John Ruskin of a portion of the picture by Paolo Veronese in the gallery of Turin, representing the subject of Solomon and the Queen of Sheba, given by Professor C. E. Norton; a water color drawing by J. M. W. Turner, purchased out of the income of the Prichard fund; seventeen lead pencil drawings by Turner, for the purchase of which Mr. James Loeb, '88, made us the generous gift of $1000; a marble bust portrait of Professor Norton by V. D. Brenner, a gift from Mr. James Loeb; and a bronze medal in commemoration of President Eliot and the University, given by Mr. F. A. Delano, '85.

The accessions to the print collections are: to the Randall Collection, by purchase from the income of the Randall fund, the Copper-Plate Magazine, 5 vol., containing engravings by William and John Walker, James Fittler, William Ellis, James Heath, James Storer, and others.

There have been 670 additions to the collection of photographs, including illustrations of Italian architecture and sculpture, works by the English Pre-Raphaelites, and modern French painting. The third year publication of the Arundel Club, containing 20 photogravures of Italian paintings, has also been received, and ten photographs of studies from nature, published in 1864 by the Editors of "The New Path."

To the collection of slides, 84 additions have been made, including illustrations of Greek sculpture and the discoveries at Delphi, mosaics in Ravenna, the Fonte Gaia in Siena, and Italian, English, Spanish, and French painting.

To the Museum library have been added 37 volumes, by gift, by purchase, and by transfer from the University Library. By gift from Professor C. E. Norton: Description of Ancient Terra Cottas in the British Museum; Description of Ancient Marbles in the British Museum. By purchase from the income of the Randall fund: the

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representation of the development of a modern nation through a historical display of its art. This undertaking has met with the readiest response and the most generous support from the German Emperor, various German Governments, German cities, and the German public. A collection of typical and representative works of art has been brought together such as no other university either in Europe or America possesses. Is it not clearly for Americans, and above all for Americans of German blood, to see to it that this priceless collection at last be worthily housed and that a possibility be given to put before American students a complete and truly historical conspectus of the artistic development of the Fatherland? Until there is assurance of a new building, the cost of which inclusive of its endowment should be about $300,000, our undertaking cannot be pursued any further. We cannot even ask for further gifts of objects, for we have no space left in which to place them. With a large and suitable building we should undoubtedly have a constant influx of gifts from Germany similar to those received thus far, and should therefore soon grow up to the proportions of a true museum of national culture. As it is, we are in the ignominious position of having to decline even the smallest objects that may be offered to us, or to store them away unused and unseen. This is an intolerable condition of things. Here is the opportunity for our fellow citizens of German origin to prove to the world that they do not leave their ideals at home when they leave the Fatherland, and here is a chance for all Americans to show their appreciation of what German culture has given to this country.

KUNO FRANCKE, *Curator*.

COLLECTION OF CLASSICAL ANTIQUITIES.

To the President of the University:—

Sir,—As Curator of Classical Antiquities, I have the honor to present the following report for the year 1906–07.

The Collection of Classical Antiquities in Sever 25 and 27 has grown slowly but steadily during the year, thus realizing the hope of its founder that his gift might serve as a nucleus around which there might gradually be brought together a mass of material illustrative of the life of the ancient Greeks and Romans. The principal accessions have been: A collection of 33 Roman inscriptions (including a section of inscribed lead pipe), purchased in Rome by Professor Clifford H. Moore, '89, with funds provided by the Corporation; 18 specimens of Roman work in bronze (including a small figure of a Lar, a candelabrum, two mirrors, a razor, five handles, and vessels of different sorts), parts of an iron bit, a model of a Pompeian lock and key, a model of the famous fibula from Praeneste with the earliest known Latin inscription, and a large piece of mosaic decorated with a comic mask,—all these purchased in Rome by Professor M. H. Morgan, '81, also with funds provided by the Corporation; 13 Roman lamps, 8 small Greek and Roman gems, 26 Greek and 12 Roman coins, a bronze key, a bronze statuette of Minerva, and 6 excellent specimens of Graeco-Phoenician glass vases, loaned by Mr. Oric Bates, '06; a large collection of coins (including 73 Greek, 162 Roman, and a few of later times), 12 late Greek vases, and 26 fragments of Roman glass, loaned by Mr. George Moriarty, '06; 36 fragments of votive terracottas, 4 stamped amphora handles, a stamped brick, and a small piece of mosaic, presented by Dr. A. S. Pease, '02; a bronze strigil from Aegina, presented by Professor A. A. Howard, '82; and a large Roman lamp, the gift of Mrs. Schuyler Van Rensselaer, of New York. Besides these accessions, there have also been placed on exhibition in Sever 27 specimens of the armor used in the performance of the "Agamemnon," and one of the chariots made for the play, the latter a gift of the Alpha Delta Phi Club to the Department of the Classics.

The Scott Collection of monuments relating to Julius Caesar, which, through the courtesy of the Department of Fine Arts, is exhibited in the Fogg Museum, has been increased during the year by several gifts from the founder. These include: 8 casts of life-size busts of Caesar in Rome and Mantua; a cast of a small bust and a very small head in Florence; a terra-cotta bust from Florence; some 60 casts of coins, medallions, etc.; and a considerable number of photographs of statues and busts. Some of these accessions have been placed on exhibition with the casts which made up the original gift, but most of the smaller objects and two of the busts cannot yet be exhibited, owing to lack of funds for the necessary pedestals and cases.

To the collection of slides in Harvard 1 some fifty additions have been made. Here also has been placed the second of the chariots made for the Greek Play, a gift of the Porcellian Club. One hundred and thirty-eight photographs purchased by Professor Morgan in Rome have been added to the collection of photographs in Sever 16.

A considerable part of the Curator's time has been devoted to preparing a catalogue of the various collections under his charge. The original Pfeiffer-Hartwell Collection is now almost completely catalogued, and in the course of the present year most of the objects in Sever 25 and 27 should be listed.

In many ways the Collection of Classical Antiquities has already proved its usefulness. The vases and other objects are constantly used as illustrative material in the courses in classical archaeology; the bronze utensils and the terra-cottas have been used in connection with the courses on the life of the Greeks and Romans; the Roman inscriptions have been made the basis of practical exercises by students of Roman epigraphy. The greatest need at present is more and better specimens of the minor products of Greek art, such as vases and small bronzes, and money to provide for the better exhibition of the objects already acquired and of future accessions.

GEORGE H. CHASE, *Curator*

SUMMER COURSES OF INSTRUCTION.

To the President of the University: —

Sir, — As Chairman of the Committee on Summer Courses of Instruction, I have the honor to report on the Summer School of Arts and Sciences.

It is fitting that mention be made of the late Professor Nathaniel Southgate Shaler, first Chairman of the Committee on Summer Courses, who died in service April 10, 1906. Professor Shaler's relations to the Summer School were unique. He was among the earliest to undertake vacation teaching, and watched its early uncertain progress with a faith that marked him for the leadership when it was seen that the venture needed to be organized in the hands of a committee. For nearly twenty years he gave himself with unflagging zeal and energy to the unfolding problems of this new field of college endeavor; and, when there was strait, he did not hesitate to assume, personally, financial risk and loss in behalf of the work; nor would he accept a salary for his services to the School, either as teacher or as chairman.

That the Summer School has won its way, enabling thousands to find inspiration in Harvard's Halls, giving example to scores of schools elsewhere, is due to the sympathy, foresight, resourcefulness, enthusiasm, and patience of Professor Shaler.

Early Experiments with Courses for Teachers.

The Summer Courses of Instruction in Arts and Sciences have always been designed primarily for teachers in service, and for those preparing to teach, of both sexes; and, in this first report, a brief sketch of the steps by which the University has been led into its present relations to the Summer Courses seems not out of place.

In 1863 the University began an experiment the object of which was to provide instruction for graduates of colleges, teachers in public schools, and others, of either sex, who could not attend the regular classes in term-time, by means of lectures called "University Lectures." From 1863 to 1872 about twenty courses were given each year by members of the Harvard staff, or by eminent scholars from outside the University. These lectures were given on Saturdays or in the afternoons, and each course offered from six to thirty-five exercises, for a nominal fee. They treated a wide variety of subjects and were mostly of advanced grade. The registration is not recorded; except that in the fall of 1871 there were 155 persons — of whom 65 were men and 90 were women — attending the fifteen courses then in progress. This experiment was abandoned in 1872, having been adjudged to have failed "hopelessly" in attaining its objects.

Meanwhile, another plan was tried in 1869–70. Two systematic "University Courses of Instruction" were given, designed for "graduates, teachers, and other competent persons (men and women)"; the one in Philosophy, and the other in Modern Literature. There were no admission examinations; but each course closed with an optional "honors" examination. It was announced that a larger variety of similar courses would be offered in the next year. There were three lectures a week in each course, — at 3.30 P.M. on alternating week-days, — throughout the college year. Six men and seven women registered in the first year; no courses were offered in the second.

A third experiment was the institution, in 1871–72, of "The Teachers' Courses" in the Lawrence Scientific School. These were one-year courses in the elements of natural history, chemistry, and physics, "especially intended for teachers or persons intending to become teachers." Since the courses were given only in term-time to regularly enrolled students, they could not be taken by women or by teachers in service. These limitations on the attendance led several College officers to cast about for some way to provide opportunities for those who could not attend the regular classes. At this juncture the summer vacation was lengthened to thirteen weeks; and Professor Asa Gray announced that "Special instruction in botany will be given during the vacation to teachers who are unable to attend during term-time, and students who desire practice in the field can accompany Professor Gray and Dr. Farlow in their excursions." Professor Gray's experiment was successful, and was the beginning of the unbroken series of summer courses extending to the present. He made it with Dr. Farlow's aid in 1871; and repeated it in 1872, assisted by Dr. G. L. Goodale, then Instructor in Botany, — Dr. Farlow having gone to Europe for study early in 1872.

Professor Gray's course, given first in the summer of 1871, was announced, first, in the University catalogue of 1871–72. In its second year it received the following notice in the annual report of the President of the University: "In the spring and early summer of 1872 Professor Gray had a laboratory class in botany which was composed chiefly of women, who worked with energy and success. This last experience is suggestive."

PROGRESS OF THE SUMMER COURSES WITHOUT ORGANIZATION.

At the end of the summer of 1872 the period of experiment, in botany, was ended. A way had been found, in this subject at least, to attain an object for some years anxiously considered by various College officers, which was "To promote good teaching of elementary science in schools, by giving teachers opportunities for laboratory and field work." It remained to apply the new method to other subjects.*

Next in the lists was Professor Louis Agassiz. In the winter of 1872–73 he announced his plans for a summer school of natural history, which he wished to establish somewhere on the coast of Massachusetts; and appealed to the state legislature for financial aid. His project attracted the notice of a New York merchant who promptly offered the island of Penikese, in Buzzard's Bay, and $50,000 for carrying out the plan. The offer was joyfully accepted; and Agassiz spent the last summer of his life at Penikese, with more than fifty teachers and students sharing in most intimate and delightful study of his favorite subjects. This was in 1873. In the following winter Agassiz passed away. His genius made his school a success: but the situation was not advantageous, and his school did not survive its master, although it inspired other schools of like purpose in more favorable locations.

In the summer of 1874, Professor Josiah Parsons Cooke inaugurated the courses in chemistry, with 15 teachers and students in his classes, in Boylston Hall.

In the summer of 1875 Professor Shaler organized the first course in geology at Camp Harvard, Cumberland Gap, Kentucky. Professor Shaler has stated, in the Harvard Graduates' Magazine, April, 1893, that he "essayed" a summer course in geology, "in an informal manner," in 1869. In another published account of the Summer School he mentions 1868 as the date of his first experiment. He has not given an account of the nature or the results of these ventures. It is probable that they were attempts to unite teaching with his field work in geology. He has stated, however, that his course in geology was not "definitely planned" until the summer of 1875.

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* It is worthy of note that the early experiments had sought to combine courses for graduates with work for teachers. This had led to making the courses of too advanced grade for teachers, and of an unsystematic quality that suited neither group. In 1872 the motives were separated; resulting, on the one hand, in the foundations of the Graduate School of Arts and Sciences, and, on the other, in the Summer School.

No new subjects were added to the foregoing list until 1887. Meanwhile the courses in botany were given every year, — after their introduction in 1871, at the Hunnewell lecture room and laboratory in the Harvard Botanical Garden, — except in the years 1882, 1884, and 1885. Geology was not given from 1881 to 1886, inclusive. The summer courses in chemistry have not once been omitted since their beginning in 1874. In the '70's the courses in chemistry and botany were well attended, but geology fell off. In the early '80's chemistry alone held an assured place. In the years 1884 and 1885 chemistry was the only subject offered; and only twenty-five students were enrolled. In 1886 there was a marked revival of interest in the summer courses. Forty-three were enrolled in chemistry; and botany was renewed with thirty-three students. In 1887 botany and chemistry were repeated; geology was resumed with fourteen students; and physical training was introduced by Dr. D. A. Sargent with fifty-seven enrolments.

Up to this time there had been no organization of the summer courses. Professor Shaler has said that they were: "Private ventures of those who taught them, the University giving only the use of the buildings and apparatus, and thus lending its countenance to the project." It should be added that the summer courses were announced in the University Catalogue from 1874 onward. It was in a financial sense that they were "private ventures," and in the sense that the courses were not recognized as a part of the regular College work and were not supervised by any authorized person or committee.

Period of Organization and Expansion.

Whether due to lack of organization or to other causes, the record of the first fifteen years of the summer courses shows that their ultimate success was very uncertain. In all this period the highest enrolment was ninety-eight, in 1875. With some slight fluctuations, there had been a steady decline. But the gain in 1886, followed by the much larger increase in 1887, proved that there was great vitality in the purpose and plan of the work. At this stage President Eliot appointed the first committee to have charge of the summer courses, and named Professor Shaler its Chairman. The date of the appointment of this committee seems to be not a matter of record. It was not a committee of the Faculty of the College, but, as Professor Shaler says, of the Corporation; and was probably established in

1887 or 1888. It is probable that some informal general oversight was begun as early as 1886, and that this was responsible for the growth of the Summer School which was noticeable first in that year. However, gain in strength was steady henceforth, although the College Faculty gave the summer courses no sanction until 1891, except the occasional credit to a student of a record in a summer course in lieu of a College examination by special vote in each case.

Formal recognition by the Faculty of Arts and Sciences was obtained through a vote on May 5, 1891, specifying the conditions under which eight of the nineteen courses given in that year might be counted in fulfilment of the requirements for degrees. Soon after, a committee of the Faculty was appointed to have immediate charge of the summer courses. Professor Shaler was named Chairman.

The effect of the Faculty vote was prompt. In 1892 the number of courses rose from 19 to 28, and the enrolment from 287 to 435. The World's Fair in Chicago, in 1893, checked the School for the year; but the enlargement of the work was notable in the '90's. In 1899 there were 44 courses, attended by 636 persons. In 1900 the enrolment leaped to 789, due, mainly, to the publicity given the summer work by the coming to Cambridge of over 1200 Cuban teachers to receive instruction planned for them by the University. In 1903 the number of students in the Summer School again increased abnormally, reaching 1186, owing to the meeting in Boston of the National Education Association, under the presidency of President Eliot. Omitting this exceptional year, the average enrolment from 1901 to 1907 has been 793, with 737 as the lowest, in 1902; and 842 as the highest, in 1905. The average number of courses given during this period was 64.

Since the record of the annual enrolment has been kept, beginning with 1874, the total number of persons listed is 12,455, of whom 8,210 were teachers. The fact that members return for more than one session, — so that many have been listed more than once, — would reduce these totals by 25% to 30%. It is well within bounds, therefore, to say that upwards of 8000 persons have attended the Harvard Summer School of Arts and Sciences; of whom above 5,000 were teachers; and more than 4,500 were women.

The Summer School of 1907.

Statistics of the Summer School of 1907 show a satisfactory increase in the number of students in the following groups: persons registered; teachers; men; graduates; students; from New England; from the Middle States; and from Foreign States. The total of women shows a further decline in numbers; and the totals from the Southern and Lake States are still falling off.

A list of the courses of instruction, showing the enrolment in each, and indicating those accepted by the Faculty for degrees in Arts and Sciences, will be found in the report of the Dean of the Faculty of Arts and Sciences.

Below are noted some of the activities of the Summer School which are not mentioned in the Dean's report.

1. *Excursions to Places of Historic Interest.* — Seven excursions were arranged for members of the School. These were conducted by two graduates of the University, recommended for this service by the Department of History. Wednesday afternoons and Saturdays were used.

2. *Lectures and Readings.* — On Monday evenings, five lectures and readings were given by Mr. C. T. Copeland; on Wednesday evenings, six lectures on general topics were given by members of the teaching staff, or by University officers not engaged in the Summer School; on Tuesday and Friday afternoons, Mr. H. M. Kallen, Assistant in Philosophy, gave eight lectures on the "Philosophy of Art"; and on four other afternoons, members of the classes in Public Speaking gave readings of miscellaneous selections, and Mr. B. G. Willard, an Instructor, gave a lecture on "Voice and Vocal Method."

3. *Reception and Sociables.* — One formal reception and three informal sociables were given by the Committee on Friday evenings, in the Hemenway Gymnasium, open by ticket to all members of the Summer School and invited guests. The classes in Physical Education arranged one subscription party, open to any member of the School, on the last Friday evening; these classes gave an exhibition of their work on one evening.

Morning Prayers. — These were conducted each day from 8.45 to 9 P.M., in coöperation with the Summer School of Theology, by ministers selected by the officers of that School. The average daily attendance while both Schools were in session was 135; after the close of the Summer School of Theology the average was 73.

5. *Rest-Rooms and Parlor.* — Rooms in Phillips Brooks House were reserved for the use of women. A Matron, who is a trained nurse, was in charge, and gave help in cases of slight illness. Writing materials were provided. The large parlor in the House was open to both men and women. Some daily papers and magazines were placed there for members of the School.

6. *Room for Reference-Books and Evening Study.* — The Historical Library in Harvard Hall was opened during the day and evening, for study and for the consultation of reference-books. The main purpose in opening this room was to provide a place where any instructor might deposit books for the use of his class to be accessible during the evening hours, when Gore Hall is closed. The average evening attendance was seven.

7. *Reduced Railway Fares.* — The Summer School is much indebted to the officers of the New England Passenger Association, as well as to those of the Trunk Line and of the Eastern Canadian Passenger Associations, for a renewal of the privilege of reduced rates over the lines in these Associations in 1907.

8. *Recreation.* — Members of the Summer School had the privileges of the tennis courts on Jarvis Field and of one of the University Boat-Houses on the Charles River, each on payment of a small fee to the Harvard Athletic Association. They could arrange for swimming lessons and practice at the pool in the Sargent Gymnasium on Everett street.

9. *Harvard Summer School Association.* — The School of 1907 was marked by the formation of the Harvard Summer School Association, whose object is to promote the welfare of the School and of its members. The Association includes all past members and officers of the Summer School. It promises to be serviceable in matters of general interest to its members; also in promoting meetings of groups of students for social purposes during the session of the School; as well as a valuable aid to the office of the School in distributing information about the summer courses. It is a pleasure to give below a copy of resolutions signed by the Executive Committee of the Association: —

"HARVARD SUMMER SCHOOL ASSOCIATION.

"CAMBRIDGE, August, 1907.

"The students of the Harvard Summer School have the honor and the pleasure of expressing to the Committee of the Faculty in charge, their grateful appreciation of the opportunities which they have been privileged to enjoy during the session of 1907.

"It is an inspiration in itself to be enrolled in the membership of the oldest and most famous college in the land; and, to breathe its atmosphere, to study in its halls, to associate with its faculty, are privileges long to be remembered.

"We have been deeply impressed by the spirit of sympathetic interest and helpfulness which pervades the school, giving to each day a new and added pleasure; alike, in the office where the patience and resources of the Chairman never fail, in the class-rooms where the instructors give themselves cordially and freely to individual needs, and in the student body itself, which quickly responds to the spirit of the school.

"We gratefully remember the delightful opportunities for recreation and entertainment so generously provided in social gatherings, afternoon and evening lectures and readings, historical excursions, and gymnastic exhibitions.

"The women students, peculiarly favored in having the doors of Harvard thrown wide open to them during the summer school term, wish especially to recognize the careful provision made for their comfort and convenience."

(Signed) Walter D. Head,
Allen H. Knapp,
Eleanor M. Colleton,
Maud G. Leadbetter,
Edgar L. Raub,
Seth Sears,
Alfred R. Winter,
Mary E. Wynne,
Florence E. Leadbetter.

10. *Circular Letter to Members of the School.* — Near the close of the session of 1907 a circular of inquiry was sent to all members of the Summer School. Three hundred and sixty replies were received; and some of the results may well find place here.

(*a*) *33% first heard of the School through a former member of it; 11% through an alumnus of the University; 14% through a friend who had not been to Harvard; 16% through correspondence with the University; 4% through an advertisement; 3% through a news item in a periodical; 12% could not recall; and 7% were Harvard students.

(*b*) 32% had been members of the School in a previous year; and 27% had attended some other summer school.

(*c*) 58% desired that the summer courses be credited for a degree, 28% for the bachelor's degree, and 30% for the master's.

(*d*) 68% preferred to dine at a restaurant provided by the University, — of whom, 19% liked the Memorial Hall plan in use in 1907, 11% preferred a college hall where a fixed charge per week ($5 to $6) was made, and 38% preferred to have food served on a strictly *à la carte* plan, — 15% preferred to board at a public restaurant, *à la carte;* 11% preferred to board in the private house where they roomed; and 6% preferred to dine in a private boarding house near their lodgings.

(*e*) 87% approved (many of them warmly) the Harvard plan of concentrated effort for six weeks on a single study.

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* The percentages mentioned are *of those replying to the letter*, and not of the total membership of the School.

(*f*) 56% prefer the Tuesday following Commencement for the opening day of the School; 32% prefer July 5; and 12% would be suited by either of these dates.

11. *Fees.* — A registration fee was collected from each student in 1907, for the first time. The fee was $2, and proved a necessity. There was an increase in tuition charges in some laboratory courses, making a uniform fee of $30 for such courses. The higher tuition in these courses is warranted by the increased cost of the instruction, due to the great amount of oversight required in the laboratory, etc. There was another slight increase in fees, produced by limiting the practice of allowing certain related courses to be taken together for a reduced fee.

12. *Receipts and Expenditures.* — The total income of the School for 1907 was $23,780; of which, $22,123 was from tuition fees; $1,566 was from registration fees; and $91 was the balance from the historical excursions. The expenses of the School (not including the account of Memorial Dining Hall) amounted to $23,212, including salaries for instruction, salary of the Chairman, printing, postage, advertising, stenographer, clerical help, laboratory expenses, reception and sociables, historical excursions, morning prayers, evening lectures, Phillips Brooks House, evening reading room, ice, and other minor items.

13. The Summer School Committee gratefully acknowledges the efficient and courteous coöperation of the Bursar's Office, of the College Library, of the Memorial Hall staff, and of other University Officers, including especially the Publication Office, in all details of the School in which they had a share; they also wish to express their appreciation of the indispensable aid received from the Chairmen of the several Divisions and Departments in planning the courses of study and in securing instructors for the courses; and they cordially thank the Instructors themselves, whose enthusiasm and devotion were the inspiration of a most successful and agreeable session of the Summer School.

Some Problems and Needs of the School

1. *Lodgings.* — The University has depended entirely upon the abundant private lodging-houses in Cambridge to provide homes for those in the Summer School who come from a distance. Prices for rooms are reasonable, and Cambridge householders can accommodate twice as many as require rooms in the summer. The Summer School compiles a list of available places, and publishes it in the annual Announcement of the School.

This method of lodging members of the Summer School is, in many respects, satisfactory, although the University can exercise no supervision or control of private lodgings, and cannot guarantee their quality. The method is open to the criticism of inhospitality towards the summer members of the University, who note the obvious fact that the University possesses many desirable rooms in the dormitories, unused in the summer, and learn that other leading institutions provide excellent dormitory accommodations for both the men and women who attend their summer schools. It would seem practicable for the University to put the indispensable furnishings, including bedding, into some of its dormitories; and to modify its present form of lease to students occupying these rooms during the college year, so as to retain the right to sublet the rooms in the summer time. The service is available in summer, as in winter; a rental could be collected for furniture and room, together, which would make the investment pay in winter; many students who can ill afford to furnish their own rooms in term time would be saved this outlay; rivalries and heartburnings due to inequalities of furnishings would be lessened; and summer members of the University would be satisfied. They would also be willing to pay such a rental as would make the plan profitable. A beginning could be made with a moderate number of rooms, well located, until experience showed how many rooms would be required.

2. *Table-Board.*—The problem of supplying table-board for members of the Summer School owes its difficulty, almost entirely, to the fact that the available dining halls of the University are too large; that their equipments are designed for boarding about 1000 young men, and are not subdivided into such units as can be operated, economically, with the smaller numbers who desire to use them in the summer. There are some special problems connected with the Summer School restaurant, of which may be named: (1) the loss during the interval between Commencement and the opening of the School, when it is necessary to pay the help, and keep the hall open, with almost no boarders; (2) the different catering required for the summer patrons, who are largely women and older men than the college student; (3) the fact that fully half of those who use the hall, or would use it, go out of town during Saturday and Sunday, and take meals elsewhere on these days of each week; (4) and the trouble of securing efficient help in summer, when most waiters and other dining-room helpers are in demand at seaside, mountain, and other resorts, where they prefer to work at that season.

Notwithstanding the obstacles just mentioned, Randall Hall was operated, at no great loss, until the year 1905. Then, a combination of causes (including an absentee steward, who was managing a private restaurant at a summer resort, active competition with newly opened public restaurants, etc.) led to so considerable a loss of money that the officers of the Summer School were forced to consider some other plan. At this point the Corporation consented to open Memorial Dining Hall for 1906; and this experiment was tried again in 1907. All was done that could be done to keep down the expenses of so huge a plant; but the results were far from satisfactory financially. It is plain that nothing remains but to see whether Randall Hall may not be again made practicable; and, if that is impossible, to learn whether the University may safely depend upon private boarding-houses and public restaurants near the college. Such places have been ample for the needs; and, if the demand were laid upon them, the supply of table-board would probably be found to be more than sufficient.

But, aside from the question whether outside restaurants and boarding-houses can, and will, provide a sufficient supply of satisfactory board at reasonable prices, the question of the responsibility of the University to its summer members, and the possibility of endangering its own vital interests, must be considered. It is, of course, impossible to say how much effect dissatisfaction with Randall Hall, in 1905, may have had in causing the drop in attendance from 842 in 1905 to 779 in 1906; or to know whether Memorial Hall in 1906 pleased its patrons well enough to help produce the gain of 30 in 1907. There are causes, of much more weight, that affect the attendance; some of them will be noticed in the later divisions of this report; some have been noticed in division 1, above; and, always, the general standing of the courses offered is of most consequence. Nevertheless, the influence of a satisfactory college dining hall on the attendance must be noticeable, for teachers are spending their vacation in study and have the customary vacation appetites. It has been noted above that 68% of the replies to the circular letter last summer expressed preference for a college dining hall; and 38% expressed preference for an *à la carte* method of serving food. It would seem, therefore, that there is a choice between two evils: the opening of a hall, with the practical certainty of a money loss in its management; or depending on outside board, with strong probability of dissatisfaction and loss of students.

3. *Sabbatical Privileges.* — The question of the relation of summer teaching to the sabbatical privileges of Professors and Assistant

Professors, has been repeatedly suggested. No solution that seems satisfactory has yet been proposed. It is evident that more than one summer of teaching would need to be reckoned as the equivalent of the academic year, or half-year. This fact is a serious obstacle to be overcome, for, although the several summers should not, of necessity, be consecutive, either the Professor might not be willing to teach a sufficient number of years to earn thereby a substantial sabbatical reward, or his courses might not prove desirable as summer courses so as to warrant their repetition.

It is manifestly fair, however, to consider years of acceptable summer teaching, already completed, as effective, in some just measure, in securing an earlier, or a longer, sabbatical term, or a modification of the honorarium attached to this term. It is probably true that those who teach in both summer and winter stand in greater need of the rest and refreshing of the sabbatical year; and also, in some cases, true that they cannot afford to take the year on half salary.

4. *Endowment.* — The Summer School has, of course, a great endowment in the plant of Harvard University. But the time has come when the School could most profitably use a considerable annual free income. This could be used for adding valuable courses which now must be left out because the attendance on them is not sufficiently assured in numbers to warrant the Committee in risking the cost of offering them. Pressing needs of this kind are noted in the next division of this report. It would help solve the problems of rooms and board for members of the Summer School. It would help, most of all, by enabling the University to pay better salaries to those who teach those courses which have demonstrated their usefulness as summer courses. It is a fact that the pay for a summer course (which is the equivalent in labor for the instructor of at least a "half-course" of term-time work) is at a rate, in the cases of Professors and Assistant Professors, as well as some Instructors, of not more, often less, than half their pay for the same work in term-time. A careful study of this point would show a surprising amount of self-sacrifice and devotion to the summer teaching on the part of those who engage in it, largely because the summer class, made up for the most part of earnest men and women, appeals to them strongly as a kind of work well worth doing for its own sake, and is, therefore, highly interesting.

5. *Counting Summer Courses for Degrees.* — In recent years the Committee has been much concerned with the question of the crediting of summer courses for the ordinary degrees by the Faculty of

Arts and Sciences. Formerly, teachers, and others, who pursued summer courses, were very little occupied about academic credits. Indeed, the possibility of making summer work effective for the winning of the college diploma is a comparatively recent discovery. But the influx of graduates to teaching positions in secondary schools, the general rise in the requirements for teaching, and other causes, have operated to make teachers and school authorities, generally, take a new attitude towards a college degree. Many who were content ten years ago to take summer courses simply for the profit of the work, want the profit no less now; but they also require that their study shall be part of a plan leading towards graduation; they ask that it be certified by the institution offering it, so that it shall tell for professional advancement, or for a degree, or for both. These demands are very earnest; they exhibit a most hopeful development of educational work, and the Summer School Committee has been meeting them as fully as possible.

The use of the summer vacation by diligent college students, for study that will help them to win their degrees, has been growing at the same time that the teachers have found greater interest in degrees. Contrary to the prevalent impression, such students are *not*, largely, of the idle or incompetent class. They are in great measure serious young men and women, who find that summer study will enable them to save a year, or half a year, in winning their degrees; or who wish to use the summer for getting some subject for which they cannot find a place in their winter schedule. Vacation study has no attractions for the indolent.

In 1900 the number of courses accepted for a degree by the Faculty of Arts and Sciences was only 9 (17% of the total number given); in 1907 the number was 46 (63% of the total). The Faculty has formulated conditions for the counting of summer courses for the degrees; and stands ready, apparently, to credit any course recommended by the Department having the survey of that course. The Departments have been moving as rapidly as could be expected, in recommending their courses, with the exception of the English Department, which has recommended only one (Anglo-Saxon) of its ten courses. It is highly desirable that at least three of the English Composition courses, and that nearly all the courses in English Literature, be accepted as soon as possible, each as a half-course.

Courses which the University does not accept for degrees are not accepted, generally, elsewhere, either for degrees or for promotion; and thus both students and teachers are forced away from the courses that Harvard rejects, to courses, at other summer schools, that may be effective for their needs. It is true, moreover, that many who have no purpose to count their summer work are influenced adversely towards a course that is not counted. They are apt to conclude that the course is rejected because of some defect in it; whereas the motive of the Department for refusing to count it is generally based on the desire to keep the standard of the course high, coupled with the fear that the tone of the class would be lowered by the admission of college students wishing to count the work for a degree. Whatever grounds for this fear that may once have been supposed to exist, have disappeared; and there is now the remedy of the exclusion of an undesirable member from the class whose progress he obstructs. But the prospective summer student does not reveal his unfavorable and unjust decision, nor seek opportunity to correct it. Indeed, he could not attach weight to the usual explanation, above stated, for not counting a summer course; for if it were sound, it would utterly condemn the courses given in term-time, which are filled with undergraduates who wish to count them for a degree and could not take them if they were not to be counted.

The demand for courses that count for a degree is not limited to those courses that relate to the bachelor's degree only. There are many teachers who hold the first degree, and are planning to earn the master's degree by vacation study. It is now possible thus to earn the degree at some institutions; and the question must be faced here if the University is to hold the patronage of a large group of the best equipped teachers and principals of schools. At the present time very few courses can be offered in the Summer School that are of the grade to be counted for the master's degree; because there is not, under present conditions, sufficient demand here for them to make them self-supporting; the condition that a course be self-supporting, from its tuition fees, being forced on the School by the fact that it has no free income.

In the replies to the circular letter, 30 persons asked for courses in English that would help them towards the master's degree; 17 in Education; 17 in Mathematics; 16 in Chemistry; 12 in Latin; 7 in German; 7 in Greek; 5 in Economics; 5 in History; 5 in Philosophy; 5 in Physics; 5 in Romance Languages; 4 in Physiography; 3 in Psychology; 2 in Biology; 2 in Botany; 2 in Government; 1 in International Law; 1 in Natural History; and 1 in Mining.

In addition to offering and counting courses for degrees, some method is needed for teachers to use these courses to attain the degrees at Harvard. In some just way they should be credited for work done, and admitted to candidacy for the degree for which their study has fitted them. Plans need to be worked out which will guide them to the year when they can ask for leave of absence, when necessary, from their teaching, to reside at the University a sufficient length of time to win their goal. It should be possible that the master's degree be won by summer residence and study only.

It is obvious that in considering teachers as candidates for degrees, it would be unnecessary, in most cases, to apply the ordinary academic tests needed to guard undergraduate courses, — in respect to admission requirements, and other details of crediting work done. Most teachers have been the members of their classes who best satisfied these tests, at the time when the tests were of value in their education, — that was why they were chosen to teach. Important consideration must, in fairness, be given to that fact, to the end that they may not be unduly hampered by mere formal restrictions devised for the more youthful, and very different, general type of college candidate for a diploma. The success of the summer courses, in the high quality of class work, when no admission examination whatsoever is required, illustrates the needlessness of the entrance examination when the College may have the opportunity to admit to its privileges students whose capacity and aims are as distinguished as have been the rule in the Summer School.

The "Certificate Plan" of admission could safely and wisely be used in the cases of most teachers.

6. The Summer School is the best means yet devised here for utilizing the great educational resources of the University during the long vacation, when, without the School, so large a part of the equipment would be idle; and when there are many persons, besides teachers, who can find the opportunity for study which is denied them in winter. The value of the summer courses is, indeed, no longer doubted; the effectiveness of its methods has been well affirmed by experience; and the significance of the School in establishing mutually helpful relations between the University and the best secondary schools, is now clearly seen.

The future of the Summer School depends a great deal on the solutions found for the problems mentioned above, — problems of lodging and boarding its members; of endowment; of its offering of courses in relation to the needs of persons who are working for degrees, as well of those who are studying merely for improvement; and of the coördination of its courses with College requirements for the ordinary degrees.

JAMES LEE LOVE, *Chairman.*

RADCLIFFE COLLEGE.

To the President of the University:—

Sir,—As Dean of Radcliffe College, I have the honor to submit my report for the academic year 1906–07.

The number of students in actual attendance during the year was 468, as against 436 during the preceding year.

Graduate Students	60
Seniors	67
Juniors	67
Sophomores	84
Freshmen	84
Special Students	106
Total	468

At Commencement in June, 1907, seventy-eight students, one of whom had completed her residence in an earlier year, received the degree of Bachelor of Arts. Eight students, who had not been registered as Seniors, received the degree. Of the seventy-eight successful candidates, two received the degree *summa cum laude;* thirteen received it *magna cum laude;* twenty-two, *cum laude.*

Twenty candidates received the degree of Master of Arts. Four of the twenty had taken their first degree at Radcliffe; the others represented the following colleges: Bryn Mawr College, University of California, Carleton College, Colorado College, Mt. Holyoke College, Ohio Wesleyan University, Pomona College, Syracuse University, Vanderbilt University, Vassar College, Wellesley College, Whitman College, the Woman's College of Baltimore.

The Caroline I. Wilby Prize for 1907 was awarded to Mabel Ellery Adams, a special student, 1896–1904, 1905–1907, for a thesis entitled "An inquiry into the condition of one hundred deaf persons who have been pupils in the Horace Mann School in Boston." This prize was founded in memory of a loved teacher by her pupils in order to encourage original work by advanced students in Radcliffe College. Hitherto the award has always been made for original work undertaken in connection with the student's college work and not in competition for the prize. It has now been given seven times, in four cases to a successful candidate for the Ph.D. degree, in two cases to graduate students who were not studying for the doctorate. Miss Adams, the first special student to win the prize, is a teacher in the Horace Mann School, and her thesis was a part of her work as a student in the course in Social Ethics under Professor F. G. Peabody.

Examinations for admission were held in June, 1907, in Cambridge, Andover, Brookline, Chicago (Ill.), Concord (Mass.), Concord (N.H.), Fall River, Fitchburg, Lowell, Lynn, Manchester (N.H.), Milton, New York (N.Y.), Quincy, Springfield, Washington (Conn.), Worcester, and Youngstown (O.). They were also held in September in Cambridge. Three hundred and twenty-five candidates presented themselves for examination. Twelve were candidates for admission as Special Students; thirty-three candidates took part of the examination or worked off admission conditions; one hundred and seventy-four took the Preliminary Examinations, and one hundred and four the Final Examinations; two were admitted by examination to the Sophomore Class.

The results of the Final Examinations are given in the following table: —

	Admitted.	Admitted "Clear."	Rejected.
June	82	29	5
September	11	0	6
Total	93		
Total rejected	11		
	104		

Ninety-three candidates were admitted as Freshmen in 1906. The entering class of 1907–08 numbers sixty-three.

Sixty Graduate Students registered during the year, forty-two of whom were from other colleges. Thirty-six students were admitted to fifteen full courses, and twenty-nine students to sixteen half-courses, of the "Courses primarily for Graduates in Harvard University open to competent students of Radcliffe College."

The members of the Academic Board for 1906–07 were Professor Byerly (Chairman), and Professors E. L. Mark, S. M. Macvane, H. S. White, E. H. Hall, H. W. Smyth, A. A. Howard, G. L. Kittredge, and C. H. Grandgent.

Elizabeth Cary Agassiz House has completed its second year of satisfactory use. The statistics of the dining-room are even more remarkable this year than last. The number of luncheons provided was over 28,000, served at a very low price. The annals of Agassiz House and of Bertram Hall are happy because uneventful, except that Bertram Hall has had its first case of serious illness, necessitating an operation for appendicitis, which was successful. The long-distance telephone made it possible to act at once under the direction of the parents in a distant state. This annihilation of distance removes one of the main causes of opposition to sending a girl to College.

Grace Hopkinson Eliot Hall was completed and ready for occupation on the first day of the college year, September 26, 1907. It stands in Shepard Street, near the corner of Walker Street, facing on the Radcliffe field. Like its neighbor, Bertram Hall, which it closely resembles outwardly, it is built of brick on the Salem model of Colonial architecture. The effect of the two buildings is admirable, whether the rear view from Shepard Street is taken or the front view from the field. The plan of the interior differs widely in the two halls. Bertram Hall was intended to house twenty-five students and to serve as a social centre for other possible dormitories; with that purpose in view, the beautiful library and dining-room, with the connecting gallery and the fine stairway, were planned. A duplication of these facilities for entertainment in a second hall would have been a mistake. It was also desirable to have a large number of rooms at moderate prices. With these considerations in mind, Grace Hopkinson Eliot Hall has been built to contain accommodations for forty-three students, beside the apartment for the Mistress, the parlors and dining-room, kitchen, and offices. The interior is pleasant and will be charming when the finishing touches have been added, and even in this brief time the tenants have learnt to look upon the hall as their college home and to care for it accordingly. The Mistress of the Hall, Miss Grace E. Machado, entered upon her duties in September.

To Mrs. David P. Kimball, the donor of Bertram Hall, we owe the gift of this second hall. Radcliffe can never thank her enough for her generosity and devotion, above all for her constant and faithful care for the best interests of the College.

The new Library is nearly completed; the hope that it would be ready for use in September was abandoned before the contract was signed, and the date fixed (November 1st) is past. Another hope — that the building of the new library would not interfere with the use of the old — has been fulfilled, and it will be a comparatively easy task to move the books the very short distance from the one to the other. After they are moved, the Gilman Schoolhouse, where the books have been kept since their removal from the charming little library in Fay House, cannot remain where it is; it would be an eyesore; even now it mars the effect of what will be a noble group of buildings. As stated in the Report for last year, it was Mr. Shurtleff's opinion that the Library should complete the group of which Agassiz House is the centre, and the Gymnasium the left wing, and it should in its general features correspond to the Gymnasium. Messrs. Winslow and Bigelow, the architects to whom the plans were entrusted, concurred with Mr. Shurtleff; and the architectural effect of the three buildings promises to be all that had been hoped. Because of the unusual grouping, the play of light on the faces is beautiful.

The working needs have not been sacrificed to architectural beauty. They have been amply provided against, for the present and for the future, in so far as the future can be foreseen. The main room is on the second floor, and occupies the area of the building with the exception of the space required for the Librarian's room and the stairway. The third floor gives another room as long and as broad as the reading-room on the second floor, but not so high. The first floor contains the entrance-hall, a large reading-room to the left of the hall, to the right a room to serve some future need, and another large room, which will be a memorial to Mrs. Henry Whitman. In this room will be placed the window, now in Agassiz House, which was Mrs. Whitman's last work. It was given to Radcliffe College for Agassiz House by a number of Mrs. Whitman's friends, but the setting in its present position has never been really satisfactory, and the donors agreed with the Committee on the Library building to remove the window to a place specially prepared for it in a room to be set apart as a memorial to Mrs. Whitman, and to be decorated and furnished by a Committee of the donors, at their expense, and in conference with the architects.

The endowment fund which was to duplicate Mr. Carnegie's gift of $75,000 has been increased by certain promised gifts and interest and amounts now to about $80,000.

Esther Fisher Hallowell, A.B. 1902, now Mrs. Arthur H. Morse, the efficient treasurer of the Library Fund, has resigned from the list of Associates on account of the removal of her residence from Medford to Kansas City.

On June 27, 1907, at the end of the college year, Mrs. Elizabeth Cary Agassiz died, at the age of eighty-four. She was associated with the Harvard Annex from the earliest days of the experiment; she was the first president of the Society for the Collegiate Instruction of Women; she grew more and more deeply interested in the work and its development; and at the time of the organization of Radcliffe College, she put aside her dread of publicity, and spoke in public at the hearing in the State House; it is said on high authority that her speech carried the day. She was the first President of Radcliffe College, and on her resignation in 1899, she was urged to remain as Honorary President; that position she retained until her death, though in 1903 she retired from active participation in the life of the College. She welcomed with unqualified delight the election of her successor, the Dean of the Faculty of Arts and Sciences in Harvard University. Her memorial is built to the outward eye in Elizabeth Cary Agassiz House, the gift of her friends and her children to the College, through her, on her eightieth birthday (December 5, 1902); but another memorial of her is among those things that are not seen and are eternal, — the memory of her character and temperament, of the atmosphere which she created about herself, of the ideals which she cherished and upheld, — the memory of these has passed into the spirit of the College, and is part of Radcliffe's rich inheritance, which it is our duty and our happiness to transmit to the generations of students to come.

AGNES IRWIN, *Dean.*

APPENDIX.

REPORTS OF THE JOINT COMMITTEE ON THE ORGANIZATION OF THE UNIVERSITY.

TO THE PRESIDENT AND FELLOWS AND THE BOARD OF OVERSEERS: —

The Joint Committee on the Organization of the University have the honor to submit the following report.

They heard several professors at a series of meetings, and the President communicated to the Committee letters received from other professors, and reported to the Committee the discussion in the Faculty of Arts and Sciences on the expediency of instituting a President's cabinet or council, and the results of that discussion. It appeared at the hearings and from the discussions in the Faculty that the idea of a President's cabinet, or a council of deans, or a group of vice-presidents with separate provinces, was almost unanimously distrusted by the Faculty as tending to the establishment of a new authority which would incline toward excessive conservatism. The Committee have considered for themselves all the various opinions and recommendations which have been brought to their notice, and the majority of the Committee have agreed on the following statement: —

The existing difficulties in the organization and administration of the University relate to the business of the Corporation, the President, and the various Boards and Committees of the Faculty of Arts and Sciences. It is the conclusion of the majority of your Committee that no changes are necessary in the functions of the Corporation, the President, and the Faculty Boards and Committees, but that valuable inprovements can be made in the present modes of performing those functions. The Corporation meetings have been of late years encumbered with masses of details. Last Summer a new Board was created, called the Resident Executive Board, consisting of the President, the Comptroller, the Bursar, the Inspector of Grounds and Buildings, the Secretary to the Corporation, the Assistant Dean of Harvard College, and the Regent. This new Board is to deal with a large number of administrative details which have heretofore been carried through the President to the Corporation. The Board has stated meetings once a fortnight, and disposes finally of most of the questions which come before it, referring to the Corporation, in a well-prepared state, such matters only as require action on the part of the President and Fellows. At the stated meetings of this Board the members have an opportunity of hearing about each other's work, and bringing about the desirable coöperation between their different offices. The establishment of this Board is an undoubted improvement, which has been effected since your Committee were appointed.

In the opinion of the majority of your Committee the President of the University does not need to be relieved of any function he now performs; but he ought to be relieved of details in many directions and to have more assistance than he now has in conducting the correspondence of the University. The appointment of a Secretary to the President (the title was subsequently changed to Secretary to the Corporation), at the instance of the Board of Overseers in 1901, was an important administrative improvement, and this improvement, in the judgment of the Committee, should be carried farther. The Secretary should have an assistant, a graduate of the College with a liking for administrative work, and a desire to render active service to the University. The Secretary to the Corporation should also be provided with larger quarters in University Hall. Through the Secretary and his assistant much of the President's correspondence can be conducted, and much of the Corporation business can be thoroughly prepared so as to save time at the Corporation meetings.

Since 1890, when the present Faculty of Arts and Sciences was first organized, the Faculty has greatly increased in size, and has more and more delegated its executive business to administrative boards and committees, and to the sections of the Faculty by subject of instruction called Divisions and Departments. The Faculty is much too large a body for executive work; but it is an invaluable body for discussion and legislation. Through its Deans and its various subdivisions and committees it now transacts its executive business much more effectively than formerly, and more effectively than any other Faculty in the University now conducts its business. The Faculty of Arts and Sciences, therefore, need not be changed in its structure, or in its functions; but the grounds on which its four Deans have been selected may well be somewhat broader in future, and the size of some of its subdivisions for executive purposes, like the administrative boards and standing committees, for example, may well be reduced. In selecting future Deans, more attention may be directed to their insight and foresight in educational matters, and their capacity to develop systematically their several sections of the University. Nevertheless, it will be necessary, in selecting Deans, to keep in view also their ability to deal successfully with the individual student. Already the four Deans in the Faculty of Arts and Sciences have acted with the President as a sort of council or committee to present to the Faculty projects for discussion.

Each Division or Department of the Faculty of Arts and Sciences consists of all the members of the Faculty who teach the subject which characterizes and defines the Division or Department, as, for example, the Classics, History and Government, Mathematics, or Chemistry. The membership of these Divisions or Departments is therefore large or small, according to the number of teachers provided for the several subjects taught in the Faculty of Arts and Sciences. The Chairmen of the Divisions or Departments are now selected by the President and the four Deans who sit in the Faculty; and these Chairmen are changed every few years. It is seldom that a Chairman serves more than five consecutive years, and seniority is not regarded in the selection of Chairmen. The Chairmen of large Divisions or Departments have a considerable amount of correspondence and other business which requires clerical assistance. In the opinion of your Committee, the College should provide a clerical force expressly to aid the Chairmen of Divisions and Departments in the dispatch of their official business.

The Administrative Boards and Committees of the Faculty might, in the opinion of your Committee, be advantageously reduced in size. This process has already begun, but might well be carried farther. Large committees are less effective than small committees, and they consume the time of an unnecessary number of University teachers.

The subordinate Boards and Committees heretofore established, or to be established, should be encouraged to take final action on all questions for the determination of which sound precedents have been settled, or which can be acted upon under standing rules of the Corporation or the Faculty. They should be advised not to refer to the Corporation or to the Faculties questions which involve no change of established policy or practice. When good judgment suggests that an exception be made to a general rule or practice, the Board or Committee concerned should be encouraged to make the exception itself. In other words, administrative discretion should be freely used by trusted officials and committees.

In conclusion, the majority of your Committee desire to express the belief that the organization of Harvard University is, in general, a singularly fortunate and successful one, and particularly that the functions of the President, as they have been developed during the growth of the University since the Civil War, are of high value, in that they tend to unify the University, and to place the experience of each Governing Board and every Faculty at the service of the whole institution. The chief innovation in the administration of the University since 1890 is the growing influence of the Divisions and Departments in the Faculty of Arts and Sciences. This growth is wholesome, and should be encouraged, and coördinated with the functions of the Corporation, the President, and the Faculty. It may be expected that the Divisions and Departments will ultimately control annual appointments, suggest promotions of young teachers, propose extensions of instruction, and devise and urge new expenditures for apparatus and equipment. Their action will need to be actively supervised by the President, the Deans, and the Faculty's Committee on Instruction. The functions of this last named Committee will probably need to be gradually enlarged; indeed, this process has already begun.

It will be observed that the changes, or rather improvements, which your Committee suggest, are all natural outgrowths of present practices, or developments of measures already initiated.

(Signed) Charles W. Eliot,
Henry P. Walcott,
Francis C. Lowell,
Louis A. Frothingham.

December 12, 1906.

The undersigned, a member of the Committee, is unable to concur in certain of the conclusions of the foregoing Report; especially in the statement contained in the paragraph beginning "In conclusion" (p. 3). He does not think, however, that any beneficial results would follow from a more detailed statement of the grounds of his dissent at this time. He, therefore, confines himself to a mere intimation that in his judgment far more comprehensive measures of reform would be desirable than those indicated above. So far as they go, however, the changes, etc., proposed would not seem to be in themselves open to objection. To them, therefore, as partial remedies applicable to existing conditions, he gives assent.

(Signed) Charles F. Adams.

December 12, 1906.

The undersigned feels that the changes recommended in the majority report are probably in the right direction, but that they still leave the administrative organization of the University in a cumbersome and somewhat ineffective condition.

(Signed) James J. Storrow.

January 9, 1907.

TERMS OF THE WILLIAM BELDEN NOBLE LECTURES.

The William Belden Noble Lectures Fund, amounting on July 31, 1906, to $24,534.86, shall be held in trust by the President and Fellows of Harvard College on the terms and for the uses described as follows: —

1. The foundation having been established in memory of William Belden Noble shall bear his name and be known as the William Belden Noble Lectures.

2. The appointment of Lecturers upon this foundation is committed to the President and Fellows of Harvard College, hereinafter designated as the Corporation.

3. The Lectures shall be delivered annually at such time and place as the Corporation shall appoint. But it is the desire of the Founder that the time be the season of Advent, if possible, and that the Lectures be closely associated with the Phillips Brooks House and be given there. Each Lecturer shall have ample notice of his appointment. Each course of Lectures shall be published and their publication shall follow as soon as possible after their delivery. The income of the fund shall be devoted

to these two ends, — (1) the payment of the Lecturers, and (2) the securing the publication of the Lectures. It is left with the Corporation to determine the number of the Lectures, to fix the compensation of the Lecturer, and to make provision for the publication of the Lectures. It is, however, understood that beyond securing the publication of the Lectures — in form as stated in Section 7 — all the income of the fund shall go towards the payment of the Lecturer.

4. The object of the Founder of the Lectures is to continue the mission of her husband, whose supreme desire was to extend the influence of Jesus as "the Way, the Truth, and the Life," and to illustrate and enforce the words of Jesus, — "I am come that they might have life and that they might have it more abundantly." The Founder has in view the presentation of the personality of Jesus, as given in the New Testament, or unfolded in the history of the Christian Church, or illustrated in the inward experience of His followers, or as the inspiration to Christian Missions for the conversion of the world. Both the Founder and he in whose name the Lectures are established were in deep sympathy with the teaching of the late Phillips Brooks; and a treatise by him entitled "The Influence of Jesus" (E. P. Dutton & Co., New York, 1879), and these among his published sermons: "The Light of the World" (Sermons, Vol. V, E. P. Dutton & Co., New York, 1892), "The Leadership of Christ" (Sermons, Vol. VI), and "The Church of the Living God" (Sermons, Vol. V, 1892); also "The Message of Christ to the Individual Man," by Alexander V. G. Allen, being the first Lecture given on the William Belden Noble foundation in the Series of 1898, entitled "The Message of Christ to Manhood" (Houghton, Mifflin & Co., Boston, 1898), will serve to guide the Lecturers in interpreting the spirit of this foundation. It is the desire of the Founder that the Lecturer for each year shall be himself animated by the further motive which inspires this foundation, — the hope of arousing in young men, and primarily in the students of Harvard University, the joy of service for Christ and humanity, especially in the ministry of the Christian Church. The scope of the Lectures is believed to be as wide as the highest interests of humanity. With this end in view — the perfection of the spiritual man, and the consecration, by the spirit of Jesus, of every department of human character, thought, or activity, the Lecturer will choose his subject. A copy of the terms of this foundation shall be sent to the Lecturer for each year with the notice of his appointment.

5. In order to manifest and promote the purpose of the Lectures, it is suggested that they be preceded and followed by prayer; but this suggestion is left to the discretion of the Lecturer.

6. If, for unavoidable reasons, there is failure in any year to secure a Lecturer, or the Lecturer should be unable to fulfil his appointment, or it should be deemed wise in the judgment of the Corporation in any year to omit the delivery of the Lectures, the income of the fund for said year shall be added to the fund. Should the fund be thus augmented in the course of time to $30,000, it is left to the judgment of the Corporation to deter-

mine whether there shall be any further increase of the fund. If, after the fund has reached the sum of $30,000, it should be decided not to add the income to it of any year thereafter in which, for wise or necessary reasons in the judgment of the Corporation, the Lectures are omitted, the income of said year is placed at the disposal of the Corporation to be used by them for any purpose connected with the religious welfare of Harvard University, and whenever possible in the name and to the honor of William Belden Noble. But this provision, which recognizes the possibility of omission or failure to secure the delivery of the Lectures in any year, is not designed to negative or qualify the provision which calls for the annual delivery of the Lectures, the securing of which the Founder trusts to the most earnest efforts of the Corporation.

7. Each printed copy of the Lectures in each and every year shall contain a prefatory statement of the origin of this foundation and its purpose in the mind of the Founder as given above in Section 4, the said statement to be in form and substance satisfactory to the Corporation. The title-page and the outer cover of each printed copy shall bear the name of the foundation as well as the special title for the year, the date of delivery, and the Lecturer's name. The form, size, and binding of the printed Lectures shall, so far as possible, be uniform from year to year.

8. The copyright of each volume or series of the Lectures may be taken out in the name of the author, and he shall then be entitled to any proceeds from the sale of his work, in addition to receiving the income of the fund.

9. The Lecturer for each year shall be informed that, unless for some special reason to the contrary, due to exceptional circumstances and satisfactory to the Corporation, his Lecture or Lectures shall be from his original intellectual material, not used before and not to be used or incorporated into other works of his except by express permission of the Corporation, such courtesy to be acknowledged in the re-publication.

10. In selecting the Lecturer for each year the Corporation shall give careful consideration to any suggestions regarding the selection that they may receive from persons engaged in the religious activities of Harvard University, from the Dean of the Episcopal Theological School in Cambridge, from the Founder during her life, or from the Trustees who have hitherto held the power of appointing the Lecturers on this foundation, during their lives.

11. It is the desire of the Founder, in order that students may feel a direct responsibility for the successful delivery of the Lectures, that the Corporation should endeavor to enlist each year in the local arrangements the services of the religious societies grouped in Phillips Brooks House or of a few influential undergraduates. The Founder also desires that the President of the University should introduce the Lecturer at the opening Lecture of each course; or, if the President should be unable to perform this service, that he should delegate it to another officer of the University.

REPORT OF THE SECRETARY FOR APPOINTMENTS.

To the President of the University: —

Sir, — I have the honor of presenting a report of the work of the Appointments Office for the year ending September 30, 1907.

The total number of men registered with the Office on September 30, 1907, was 3,993 as against 3,338 at the same date in 1906, — an increase of 655. During the year 1906–07, as formerly, the demand on the University for teachers has exceeded that for men to fill business or technical positions.

The following table shows, as reported to the Office, the number of calls for teachers from schools, colleges or universities, and for men to take positions in business houses: —

Calls for Teachers: —		
Direct, from Schools, Colleges, and Universities	628	
Indirect, through Teachers' Agencies	139	767
Calls from Business Houses: —		
Direct	246	
Indirect, through Agencies	6	252
Total calls to fill Permanent Positions		1019

The following tables show the number of permanent positions filled. The total is 599: —

Permanent Teaching Positions.

Universities or Colleges: —		
Harvard University	170	
Other Universities and Colleges: —		
Regular Teachers	80	
Substitute Teachers	2	252
Technical Schools: —		
Harvard University	74	
Other Technical Schools	5	79
Normal Schools		4
Naval Academies		2
Military Academy		1
Government School		1
Public High Schools		17
Private Schools, Endowed Schools, Academies, Seminaries: —		
Regular Teachers	45	
Substitute Teacher	1	46
Tutors or Companions (one year)		11
Private Assistants to Professor		2
Total		415

ADMINISTRATIVE POSITIONS (EDUCATIONAL).

President of Normal School	1
Superintendents of Schools	3
Assistant Superintendent of Schools	1
Head-masters or Principals	7
Sub-master	1
Total	13

COLLEGE POSITIONS (NOT TEACHING).

Auditor, Randall Hall Association	1
Clerk for College Office	1
Laboratory Assistant	1
Library Attendant	1
Proctors (College rooms)	66
Research Assistant	1
Secretary	1
Assistant Secretary	1
Director, Research School for Social Workers	1
Total	74

PERMANENT BUSINESS POSITIONS.

Art Company	1	Newspaper Reporters	5
Banking Houses	8	Publishing Houses	3
Brokerage Firms	2	Real Estate	2
Bureau of Corporations	2	Secretaries	6
Land Company	1	Telephone Companies	2
Law Offices	6	Wholesale Dealers	2
Manufacturing Concerns	12	Total	52

PERMANENT BUSINESS POSITIONS (TECHNICAL).

Architects		3
Chemists		9
Engineers:		
Civil	2	
Electrical	12	
Mechanical	5	
Mining	3	22
Foresters		10
Pathologist		1
Total		45

The following table shows the number of temporary positions filled, — 1,452 in all: —

TEMPORARY WORK.

Administrative	3
Athletic Coaches	3
Attendants	5
Boatman	1
Bookkeepers	4
Canvassers	16
Caretakers of Houses	3
Chauffeur	1
Choremen	39
Clerks	171
Clock Repairer	1
Collectors	9
Companions	5
Computers	2
Correctors (Examination Books, Themes)	7
Dramatic Club (Chair Movers, Scene Shifters, etc.)	16
Draughtsmen	14
Expressmen	2
Farm Hands	3
Foresters	8
Furnace Tenders	9
Gardeners	4
Geology Assistant	1
Geology Expert	1
Guides	46
Hotel Help	6
Janitors	3
Lecturers	2
Legal Assistant	1
Library (Cataloguing)	2
Literary Work	2
Marketman	1
Messengers (Errands)	13
Meter Readers	48
Monitors	17
Museum (Cleaning Specimens)	2
Museum Guards	12
Musicians and Musical Directors	10
Newspaper Correspondents	5
Night School Teachers	4
Painter	1
Photographer	1
Policeman	1
Printer	1
Proctors	69
Proofreaders	2
Railroad (Motormen and Conductors)	8
Readers	5
Research Workers	2
Rooms for Services	4
Secretaries	8
Settlement Workers	9
Snow Shovellers	6
Solicitors	16
Statisticians	99
Stenographers	35
Store Clerks	42
Substitutes for Schools	5
Summer Camps (Councillors, Directors, Tutors)	4
Summer School Teachers	7
Supervisors of Study	68
Surveyors	3
Teaching Assistants (College or Institute)	5
Ticket Takers	282
Timekeeper	1
Translators	8
Tutors and Companions	46
Tutors (Special Subjects)	189
Typewriters	20
Usher	1
Waiters	2
Total	1452
Total permanent and temporary positions	2051

The table on pages 346, 347 sets forth the geographical distribution of the permanent teaching, educational, and business positions filled.

GEOGRAPHICAL DISTRIBUTION.

	Universities or Colleges.	Technical Schools.	Normal Schools.	Naval Academies.	Military School.	Government School.	Public Schools.	Private Schools, Endowed Academies, Seminaries.	Tutors or Companions 1 year.
NORTH ATLANTIC DIVISION:									
Maine	2	..	..	..	..	..	..	..	..
New Hampshire	2	..	..	..	..	..	..	1	..
Vermont	..	..	..	..	..	..	..	..	..
Massachusetts	177	77	..	..	..	..	5	15	3
Rhode Island	..	..	..	..	..	..	..	2	..
Connecticut	3	..	..	..	..	..	..	3	..
New York	4	..	3	..	..	..	1	12	2
New Jersey	3	..	..	..	..	..	3	2	2
Pennsylvania	5	..	..	..	..	..	3	..	..
SOUTH ATLANTIC DIVISION:									
Maryland	..	..	..	2	..	..	1	1	..
District of Columbia	1	..	..	..	..	..	..	..	..
Virginia	1	..	..	..	..	..	..	1	..
West Virginia	1	..	..	..	..	..	..	..	..
North Carolina	2	..	..	..	..	..	..	..	..
Georgia	..	..	..	..	..	..	..	..	..
Florida	1	..	..	..	..	..	..	..	..
SOUTH CENTRAL DIVISION:									
Kentucky	..	..	..	..	..	..	..	1	..
Louisiana	2	..	..	..	..	..	..	..	..
Texas	1	..	..	..	1	..	..	..	..
NORTH CENTRAL DIVISION:									
Ohio	8	1	..	..	..	..	1	2	..
Indiana	..	..	..	..	..	..	..	..	..
Illinois	6	..	..	..	..	..	..	2	..
Michigan	2	..	..	..	..	..	..	2	..
Wisconsin	8	..	..	..	..	..	..	1	..
Minnesota	1	..	..	..	..	..	..	1	..
Iowa	2	..	..	..	..	..	..	..	..
Missouri	7	1	..	..	..	..	..	..	..
North Dakota	..	..	..	..	..	..	..	..	..
South Dakota	..	..	..	..	..	..	..	..	..
Nebraska	1	..	..	..	..	..	..	..	..
Kansas	..	..	1	..	..	..	..	..	..
WESTERN DIVISION:									
Wyoming	..	..	..	..	..	..	..	..	1
Arizona	..	..	..	..	..	..	..	..	..
Idaho	1	..	..	..	..	..	..	..	..
Washington	2	..	..	..	..	..	3	..	..
California	3	..	..	..	..	..	..	..	..
CANADA	4	..	..	..	..	..	..	..	..
FRANCE	1	..	..	..	..	..	..	..	..
EUROPE (or general travel)	..	..	..	..	..	..	..	..	3
JAPAN	1	..	..	..	..	1	..	..	..
Total positions	252	79	4	2	1	1	17	46	11

GEOGRAPHICAL DISTRIBUTION (*concluded*).

	President.	Superintendents.	Assistant Superintendent.	Head-masters or Principals.	Sub-master.	Proctors (College Rooms).	Private Assistants to Professors.	Business.	Business — Technical.	Totals for States.
NORTH ATLANTIC DIVISION:										
Maine	..	2	..	..	..	..	..	..	..	4
New Hampshire	..	..	..	..	..	..	..	3	..	6
Vermont	..	..	..	..	..	..	..	..	1	1
Massachusetts	..	..	..	2	1	66	2	44	20	412
Rhode Island	..	..	..	1	..	..	..	..	..	3
Connecticut	..	..	..	..	..	..	..	..	..	6
New York	..	..	..	2	..	..	..	6	8	38
New Jersey	..	..	..	..	..	..	..	..	..	10
Pennsylvania	..	..	..	..	..	..	..	1	3	12
SOUTH ATLANTIC DIVISION:										
Maryland	..	..	..	..	..	..	..	..	..	4
District of Columbia	..	..	1	..	..	..	..	3	6	11
Virginia	..	..	..	..	..	..	..	..	1	3
West Virginia	..	..	..	..	..	..	..	..	..	1
North Carolina	..	..	..	..	..	..	..	..	..	2
Georgia	..	1	..	..	..	..	..	..	..	1
Florida	..	..	..	..	..	..	..	..	..	1
SOUTH CENTRAL DIVISION:										
Kentucky	..	..	..	..	..	..	..	..	1	2
Louisiana	..	..	..	..	..	..	..	..	..	2
Texas	..	..	..	..	..	..	..	..	..	2
NORTH CENTRAL DIVISION:										
Ohio	..	..	..	1	..	..	..	..	1	14
Indiana	..	..	..	..	..	..	..	..	1	1
Illinois	..	..	..	..	..	..	..	1	..	9
Michigan	..	..	..	..	..	..	..	..	..	4
Wisconsin	..	..	..	..	..	..	..	..	..	9
Minnesota	..	..	..	..	..	..	..	..	..	2
Iowa	..	..	..	..	..	..	..	..	..	2
Missouri	..	..	..	..	..	..	..	..	1	9
North Dakota	1	..	..	..	..	..	..	..	..	1
South Dakota	..	..	..	1	..	..	..	..	..	1
Nebraska	..	..	..	..	..	..	..	..	..	1
Kansas	..	..	..	..	..	..	..	..	..	1
WESTERN DIVISION:										
Wyoming	..	..	..	..	..	..	..	..	..	1
Arizona	..	..	..	..	..	..	..	..	1	1
Idaho	..	..	..	..	..	..	..	1	..	2
Washington	..	..	..	..	..	..	..	1	..	6
California	..	..	..	..	..	..	..	..	..	3
CANADA	..	..	..	..	..	..	..	..	1	5
FRANCE	..	..	..	..	..	..	..	..	..	1
EUROPE (or general travel)	..	..	..	..	..	..	..	..	..	3
JAPAN	..	..	..	..	..	..	..	..	..	2
Total positions	1	3	1	7	1	66	2	60	45	599

The following table shows the demands on various Departments of the University for teachers in single subjects: —

Semitic	1
Greek	3
Latin	4
English	43
Public Speaking	3
French	6
German	9
History	19
Government	9
Economics	19
Law	5
Philosophy	14
Psychology	4
Social Ethics	3
Education	4
Fine Arts	1
Landscape Architecture	3
Architecture	2
Drawing	1
Music	2
Mathematics	15
Astronomy	3
Physics	9
Chemistry	28
Engineering	6
Mechanics	1
Hydraulics	2
Forestry	1
Agriculture	1
Botany	4
Zoölogy	6
Biology	5
Geology	7
Geography	1
Anthropology	2
Anatomy	7
Physiology	4
Bacteriology	6
Pathology	6
Hygiene	2
Medicine	18
Pharmacology	1
Pediatrics	2
Orthopedics	3
Surgery	12
Obstetrics	3
Gynaecology	3
Syphilis	1
Neurology	1
Ophthalmology	3
Laryngology	3
Mental Diseases	2
Athletics	1
Gymnastics	6
Total	330

The following table shows the number of men supplied to teach combined subjects: —

Latin and Greek	10
Latin, Greek, German, and French	1
Latin and Mathematics	2
Latin and English	1
English and Athletics	1
English and German	1
English, History, Geography, and Latin	1
English and History	3
French and German	3
French, German, and Latin	1
French and Italian	1
French and Spanish	5
Romance Languages	13
German and Mathematics	1
German, Mathematics, and French	1
German and Latin	1
History and Pedagogy	1
History, Geography, and Gymnastics	1
Mathematics and Science	3
Mathematics and Surveying	1
Physics and Chemistry	3
Physics, Chemistry, French, and German	1
Physics, Chemistry, and general tutoring	1
Physics and general tutoring	1
Shopwork	1
Applied Mechanics and Hydraulics	1
Physiography and Meteorology	1
Mining and Metallurgy	3
Mineralogy and Petrography	1
Anatomy, Laryngology, and Otology	1
Histology and Embryology	2
Pathology and Neurology	1
General Teachers	3
Total	72

The salaries of 598 out of the 599 permanent positions filled amount to $449,699.00; divided as follows: —

	Salaries.	Number of Positions.
Universities, Colleges, Technical and Normal Schools	$212,962.00	338
Secondary Schools	106,875.00	79
Tutoring	21,075.00	11
Business	108,787.00	170
Total	$449,699.00	598

No report has been received from one man; his salary may be estimated at $520.

The above tables show the number of positions filled by the Appointments Office in coöperation with the various Departments of the University. The increase of 522 over last year is to be explained, as in former years, partly by the natural growth of the Office, but still more by the closer coöperation existing between it and the various Departments, and also by the advertising of the Office through the branch opened on May 1st, at 50 State Street, Boston, in connection with the Office of The Harvard Alumni Association. To this office have been removed the blanks of men desiring business or technical positions; and employers, consequently, have found it convenient to consult the records there. Large as is the total number of positions filled, yet it falls far short of including all the positions secured through the influence or recommendation of the various Departments of the University. It will be noticed that, although a large number of students annually secure positions through the influence of the Law and Medical Faculties, yet they are not included in the above figures. Furthermore, many temporary jobs are constantly being filled, no report of which ever reaches the Office. It is hoped that another year the positions obtained on the recommendation of the Professors of Law and Medicine and more of the odd jobs just mentioned may be reported to the Appointments Office.

Satisfactory as the general results may be, there is, as was pointed out last year, still much to be done in spreading the reputation of the Office among people both in Cambridge and Boston and throughout the country at large.

E. H. WELLS,
Secretary for Appointments.

REPORT OF THE CHAIRMAN OF THE COMMITTEE ON ADMISSION.

To the President of the University: —

Sir, — I have the honor to submit to you a report of the work of the Committee on Admission.

During the past year, the Committee have received and acted upon one thousand and seventy applications for admission to Harvard, and one hundred and twenty-seven applications for admission to Radcliffe. I beg leave to present a summary of the action of the Committee upon the applications for admission to Harvard, together with statistics based upon the admission examinations of 1907, and an account of some of the results of our present system of admission by examination.

APPLICATIONS FOR ADMISSION BY EXAMINATION.

	A.B.	S.B.	Total.
Admitted without conditions	249	15	264
Admitted with conditions	260	70	330
Total number admitted Freshmen	509	85	594
Admitted provisionally as Special Students	22	18	40
Refused admission	66	47	113
Candidates in June who did not reappear in September	34	17	51
Total number	631	167	798

APPLICATIONS FOR ADMISSION WITHOUT EXAMINATION FROM OTHER COLLEGES AND SCIENTIFIC SCHOOLS.

Admitted provisionally as Special Students, with promise of re-rating in accordance with record of first year in Harvard	62
Admitted as Freshmen	10
" " Sophomores	31
" " Juniors	24
" " Seniors	4
Advised to enter Graduate School	11
Refused admission	14

APPLICATIONS FOR ADMISSION AS SPECIAL STUDENTS WITHOUT EXAMINATION.

Admitted	78
Refused admission	38
Total number of cases considered	1070

STATISTICS BASED UPON THE ADMISSION EXAMINATIONS OF 1907.

Preliminary Examinations.

In addition to the seven hundred and ninety-eight Final Candidates noted in the figures given above, examinations were taken by nine hundred and twenty-eight young men who desire to divide their examinations among several examination periods. These young men registered as follows: —

Candidates for the degree of A.B	798
" " " " S B	130
Total	928

Last year, the total number of men taking Preliminary Examinations was eight hundred and forty-three.

CLASSIFICATION OF CANDIDATES FOR ADMISSION, BOTH FINAL AND PRELIMINARY, ACCORDING TO RESIDENCE.

(For purposes of comparison, the corresponding figures for 1906 are given.)

NORTH ATLANTIC DIVISION:	1906.	1907.
Maine	18	28
New Hampshire	31	24
Vermont	6	11
Massachusetts	966	1051
Rhode Island	11	8
Connecticut	15	20
New York	236	230
New Jersey	33	25
Pennsylvania	70	63
	1386	1460
SOUTH ATLANTIC DIVISION:		
Delaware	5	3
Maryland	15	10
District of Columbia	13	11
Virginia	2	2
West Virginia	2	0
Georgia	2	2
	39	28
WESTERN DIVISION:		
Montana	1	4
Colorado	5	4
New Mexico	1	1
Arizona	1	0
Utah	1	3
Nevada	1	1
Idaho	0	3
Washington	4	5
Oregon	5	4
California	18	18
Wyoming	0	1
	37	44
NORTH CENTRAL DIVISION:		
Ohio	51	62
Indiana	10	5
Illinois	36	35
Michigan	7	12
Wisconsin	9	14
Minnesota	9	8
Iowa	6	7

NORTH CENTRAL DIVISION:	1906.	1907.
Missouri	16	12
North Dakota	2	1
South Dakota	1	2
Nebraska	3	0
Kansas	2	2
	152	160
SOUTH CENTRAL DIVISION:		
Kentucky	3	3
Tennessee	4	4
Alabama	1	1
Mississippi	1	3
Louisiana	1	1
Texas	2	1
Arkansas	2	0
Oklahoma	1	0
	15	13
FOREIGN:		
Canada	1	0
Cuba	1	2
England	2	2
Germany	2	0
France	0	2
India	2	0
Ireland	1	0
Italy	1	1
Mexico	1	0
Japan	0	3
Russia	1	0
Switzerland	1	0
	13	10
INSULAR TERRITORIES AND DEPENDENCIES:		
Hawaii	5	9
Philippines	0	1
Porto Rico	0	1
	5	11
HOME UNKNOWN:		
	4	0
Total	1651	1726

From these tables, it appears that the chief gain this year is in Massachusetts.

CLASSIFICATION OF FINAL CANDIDATES FOR ADMISSION BY EXAMINATION IN 1906 AND 1907, ACCORDING TO THE SCHOOLS THEY ATTENDED.

	1906.	1907.
Number of Public Schools	117	125
" " Private "	67	62
" " Endowed "	36	36
Total	220	223
Candidates from Public Schools	337	346
" " Private "	254	254
" " Endowed "	214	198
Total	805	798
Percentage of Candidates from Various Kinds of Schools: —		
Public	41.8	43.3
Private	31.5	31.8
Endowed	26.5	24.8

Among these schools, only one hundred and twelve were represented in the final examinations of both 1906 and 1907. This year, there were candidates from one hundred and eleven schools which sent no candidates in 1906. The College draws from a large number of schools in proportion to the number admitted each year; but our connection with the majority of them is only intermittent. The schools from which we receive students every year number less than forty.

The encouraging fact that appears in the tables above is the increase in the number of candidates applying for admission from public schools. This is probably the result of the establishment of the degree of S.B. in Harvard College, and the consequent recognition of a number of new subjects taught in high schools. Previously to 1906, when young men were first admitted to Harvard College as candidates for the degree of S.B., the percentage of candidates from high schools had dropped steadily for several years. Both last year and this year, there is an increase which may grow much larger if we adopt the still more liberal policy of recognizing as admission subjects for the degree of A.B. several subjects which are now recognized only for the degree of S.B. We have on our admission list Botany, Zoölogy, Civil Government, Economics, and Freehand Drawing, — all of which we recognize in College as suitable subjects for the degree of A.B., but have not recognized thus far as subjects for admission except for candidates for the degree of S.B. Our inconsistent treatment of these subjects is bewildering to headmasters of schools, who cannot understand why two boys whose preparation for college has been identical except that one has chosen Physiography and Anatomy and the other Botany and Zoölogy should be distinguished from one another at entrance. Moreover, though we refuse to recognize Botany and Zoölogy as parts of the admission record of a candidate for the degree of A.B., we admit boys with conditions, and allow them to remove conditions by courses in Botany and Zoölogy. It is not to be wondered at that teachers of Botany and Zoölogy are bewildered by practices so inconsistent. It seems plain, however, that the steps we have taken, though they leave our relations with the schools still unsatisfactory, have improved those relations.

Examinations of the College Entrance Examination Board.—The experiment of accepting the examinations of the College Entrance Examination Board in place of our own continues to be successful by providing a means of access from places which we can hope to reach in no other way. This year, the number taking Board examinations more than doubled. The figures for this year and last, the only years in which we have had a practical working arrangement with the Board, are as follows: —

	1906.	1907.
Preliminary Candidates	66	142
Final Candidates	33	101
Total	99	243

By means of these Board examinations, we have added twenty-one entirely new schools to our list, nineteen of which are outside of New England. If the rate of increase this year is maintained, as we have every reason to hope, these examinations will be a means of extending the influence of the University to a very considerable extent.

In one respect, our administration of Board examinations probably needs correction. Thus far, we have allowed entire freedom in the taking of Board examinations. As a consequence, young men who taste the luxury of hard work only when threatened with the loss of some pleasure have taken both Harvard and Board examinations, hoping to secure insurance against failure. As we re-read the Board books, our examiners are thus compelled to read two examination papers for one man; and our office records are unnecessarily complicated. By permitting this combination in examinations, we also put more emphasis upon them than they deserve. To correct these defects, it will be sufficient to refuse to recognize at any one examination period Harvard and Board examinations in the same subjects.

This practice of taking both Harvard and Board examinations has been useful, however, by illustrating in striking ways weak points in our system of admission. The double examinations mentioned above showed very clearly how uncertain examination records are as measures of ability to do College work. I give below the results of these double examinations in some of the subjects. These examinations were taken in successive weeks. The first grade in each case is that given on the Board examination.

TABLE I.

	History.	Algebra.	Plane Geometry.	Physics.
1	. .	E C	. .	F D
2	F D	. .	. .	. .
3	. .	. .	F C	. .
4	F C	. .	. .	. .
5	F D	. .	. .	. .
6	E C	. .	. .	. .
7	F C	. .	. .	. .
8	. .	. .	E C	. .
9	. .	. .	F D	. .
10	. .	F D	. .	. .
11	E C	. .	. .	. .
12	E B	. .	. .	. .
13	. .	. .	. .	F A

TABLE II.

The candidates represented in this table failed in the Harvard examination but were passed by both Harvard and Board readers in the same subjects at the Board examinations. The first grade in each instance is that given by the Board readers; the second, the grade given by the Harvard readers on the same book.

	English.	French.	History.	Algebra.	Plane Geometry.	Logarithms.
1	D D	. .	. .	. .	C C	. .
2	. .	. .	. .	C D	. .	. .
3	. .	. .	. .	. .	C D	. .
4	. .	. .	. .	. .	C C	. .
5	. .	. .	. .	. .	. .	D D
6	. .	D D	. .	. .	C D	. .
7	. .	. .	. .	. .	. .	D D
8	. .	. .	. .	. .	. .	D D
9	. .	. .	. .	. .	B C	. .
10	. .	D D	. .	. .	. .	. .
11	. .	. .	C D	. .	. .	. .
12	. .	. .	. .	. .	C D	. .

TABLE III.

The candidates represented in this table passed both Board and Harvard examinations with somewhat marked differences in grades. The first mark in each instance is that given by the Board examiners.

	German.	French.	History.	Algebra.	Geometry.	Physics.
1	. .	. .	. .	. .	B D	. .
2	. .	. .	. .	D A	. .	. .
3	. .	. .	. .	B D	. .	. .
4	. .	. .	. .	C A	. .	. .
5	. .	. .	C A	. .	A C	. .
6	. .	. .	. .	. .	B D	. .
7	. .	. .	. .	. .	. .	D B
8	. .	. .	. .	. .	A D	. .
9	. .	. .	. .	. .	. .	D A
10	. .	. .	B D	. .	. .	. .
11	. .	. .	. .	A C	. .	. .
12	. .	B D	. .	. .	. .	. .
13	B D	. .	. .	. .	. .	. .

The tables which have been made of these records show clearly one of the weaknesses of our system of determining admission. Each June and September, the Committee on Admission are confronted with a great mass of records which they know to be very uncertain evidence with respect to fitness for admission, however good it may be with respect to training in specific subjects. They have tried to provide a corrective for the uncertainty of examination records by calling for full information in regard to school records; and their efforts in this direction have been rewarded with considerable success. But a means of correcting defects as they arise is not a cure for an evil that is a part of a system, and which has endless powers of reproduction.

Final Candidates for Admission who took more than the Required Number of Examinations. — The records of candidates who took more than the required number of examinations are especially interesting, in view of the contention made by some headmasters that colleges in general require more work for admission than can be done well, and that Harvard is the chief offender in this respect. Out of the seven hundred and ninety-eight Final Candidates, two hundred and three took examinations in more than the required number of subjects. The amount of extra work offered by individuals varied from one admission subject counting one point to English *A* and admission subjects counting seven points. These young men represented seventy-nine schools in all, divided as follows: —

Public Schools	40
Private "	23
Endowed "	16
Total	79

The records of these young men were generally good, as is indicated by the following table showing the number of honor grades (A or B) that they received: —

One.	Two.	Three.	Four.	Five.	Six.	Seven.	Eight.	Nine.	Ten.	Eleven.	None.	Total.
43	41	31	23	11	6	1	8	1	2	1	35	203

The difficulties of which the schools complain are not caused by the amount of work asked for, but by the ill-adjustment of college tests to school programmes.

The facts given above show that if a young man has the will to work he can do more than the College asks for, and do it well; but it is also true that our regulations have permitted him to do it badly with no loss of credit. During the last year, the Faculty, on recommendation of the Committee, established the following rule: —

> No extra admission subject will be counted as a course or half-course towards a degree unless offered in advance as the equivalent of a College course, and unless the examination book has been read with that end in view, and marked not lower than C.

This rule was intended to correct a very obvious defect in our regulations for admission examinations arising from our practice of allowing candidates to anticipate, by means of admission examinations, work which counts towards a degree. The following example of the working of our admission examinations will show why the Committee were induced to recommend the rule given above. In 1906, a certain young man was admitted without conditions, and with one extra subject passed with grade D. His record contained only three grades above C; and one of these grades was attained only at the third trial. Instead of entering College, this young man returned to school, where it subsequently appears he spent, so far as College work goes, an unprofitable year. Last June and last September, he presented himself again for examination in extra admission subjects, with the following results: —

June, 1907.		September, 1907.	
English *A*	E	English *A*	E
Elementary Greek	D–	Logarithms	D
" Physics	D		
Solid Geometry	D		
Logarithms	E		

Under the rules, this young man can receive sufficient credit to enable him to register, if he so desires, as a Sophomore; that is, our regulations assign more credit for work done in a preparatory school — work, moreover, that was very imperfectly tested — than would be given for work of a higher grade done in Harvard College, and completed with higher grades. This young man can graduate by doing only twelve courses, with grades above D in eight. It should be observed that he receives for a single two-hour examination passed with the grade of D— an amount of credit equivalent to two College courses in which sixteen hours of examinations are required, to say nothing of less formal tests under our own instructors. The rule given above, therefore, was aimed at a very obvious defect; but it is itself defective in that it does not go far enough. Thoroughly to correct the defects in our regulations governing the anticipation of College work, we should separate examinations for such a purpose from our admission examinations, which should be used for admission only. By using admission examinations for purposes other than to determine fitness for admission, we inevitably lower the standard of our own degrees.

AGES OF CANDIDATES ADMITTED BY EXAMINATION.

The ages of men admitted by examination last June and September were as follows: —

Ages.	Number of Men.	Ages.	Number of Men.
15–16	4	20–21	40
16–17	50	21–22	9
17–18	181	22–23	2
18–19	199	24–25	3
19–20	105	34–35	1
Total			594

The average age of these men is eighteen years, four and four-fifths months. Two years ago, when the average age of the Freshman Class was computed, it appeared to be eighteen years, nine and four-fifths months. The bases of these figures are not quite the same; but it would seem as if there is some slight ground for hope that the average age at admission is being gradually lowered.

The next tables give the percentages of failure in the subjects in which admission examinations are held: —

Elementary.	Preliminary Candidates. June and September.	All Candidates.	
		June.	September.
English	42.5	41.5	35.9
Greek	5.3	19.0	14.2
Latin	23.2	26.2	70.9
German	32.4	35.6	60.0
French	34.7	41.0	51.3
History	17.0	23.6	26.8
Algebra	18.0	22.0	29.9
Plane Geometry	20.3	25.3	40.6
Geometry	23.3	14.4	41.6
Physics	24.3	24.5	25.3
Chemistry	33.9	31.0	32.2
Geography	50.0	88.8	66.6
Physiography	100.0	85.0	75.0
Anatomy	50.0	73.3	33.3
Harmony	0.0	41.6	50.0
Botany	50.0	25.0	100.0
Zoölogy	0.0	9.6	0.0
Civil Government	100.0	62.9	56.2
Economics	100.0	66.6	71.4
Architectural Drawing	0.0	100.0	100.0
Freehand	28.5	40.9	33.3
Projections	28.5	40.0	28.5
Blacksmithing	12.5	35.2	0.0
Chipping	0.0	21.0	20.0
Machine Work	0.0	29.4	0.0
Woodworking	46.1	63.6	14.2
Advanced.			
English *A*	50.0	50.0	69.2
Greek	0.0	10.0	31.2
Latin	31.4	46.7	68.4
German	32.6	38.1	51.6
French	38.2	52.7	70.3
History	75.0	45.7	62.2
Algebra	60.0	51.1	42.2
Solid Geometry	47.3	44.5	43.7
Logarithms	33.3	47.8	51.2
Astronomy	0.0	57.1	0.0
Meteorology	11.1	24.1	100.0
Physics	50.0	80.0	100.0
Counterpoint	0.0	0.0	100.0

The percentages of failure, especially in the prescribed subjects, are high. Many failures are to be expected in those subjects which are taken by few candidates, but that over forty per cent. should fail in English indicates very decided defects somewhere, either in the schools or in the relations between schools and the College.

The next table shows, in order of the number of choices, the offerings of advanced subjects in the June examinations: —

French	440	History	118
Latin	426	Algebra	86
German	249	Meteorology	29
Greek	199	Astronomy	7
Logarithms	163	Physics	5
Solid Geometry	155	Counterpoint	2

There is some slight indication that the modern languages are superseding the ancient languages in the schools, in spite of the fact that the influence of the College is exerted in favor of the ancient languages.

The most significant tables are those which follow, showing what proportion of the candidates admitted failed in each prescribed study and in elective studies.

The first table divides admitted men according to the degrees for which they are candidates, and shows what proportion of them were admitted with conditions in prescribed subjects.

Candidates for A.B.		Candidates for S.B.	
English	3.5 per cent.	English	3.6 per cent.
Greek or Latin	2.5 " "	German or French	28.9 " "
German or French	3.3 " "	German and French	4.8 " "
History	4.8 " "	History	6.0 " "
Algebra	2.5 " "	Algebra	0.0 " "
Plane Geometry	9.0 " "	Plane Geometry	4.8 " "
Science	11.9 " "	Solid Geometry	36.1 " "
		Science	8.4 " "

The following table shows the extent to which men were admitted conditioned in elective subjects: —

Candidates for A.B.		Candidates for S.B.	
One point	34.4 per cent.	One point	69.8 per cent.
Two points	30.9 " "	Two points	53.0 " "
Three "	13.6 " "	Three "	38.5 " "
Four "	19.5 " "	Four "	27.7 " "
Five "	3.1 " "	Five "	18.0 " "
Six "	1.9 " "	Six "	4.8 " "
Seven "	.5 " "	Seven "	1.2 " "
Eight "	.3 " "		

These tables show the very considerable extent to which secondary school work is mixed with College work. This year about fifty-five per cent. of those admitted to the Freshman Class were admitted with conditions. This seems a very large percentage; but it is much lower than it has ever been before. Last year, the percentage of Freshmen admitted with conditions was sixty-eight. For the years preceding 1906, no accurate figures are obtainable because admission was then in the hands of several committees, who did not keep records in such a way as to enable us to obtain accurate figures. So far as can be ascertained, however, the percentage of men admitted with conditions for the four years preceding 1906 was between seventy and eighty. The increase in the number of men admitted without conditions this year is due to recent changes made in the rules governing admission, rules which formerly actually compelled men to enter with conditions.

The first of the two tables given above deserves especial attention because it exhibits the extent to which our present methods of admission interfere with College work. The young men represented in this table must do one of two things, either they must continue the school subject in which they are conditioned by the side of their College work, and run for luck at some subsequent examination, or they must take a College course in the subject in which they are conditioned. Both of these methods injure College work. The first method puts an unreal value on examinations, and compels the College to appear in the light of holding up a D— in a school subject as an achievement without which the College will not confer a degree. It is an especially objectionable method when it results, as it sometimes does, in a man's staying in College four years without removing a condition in a subject which the College has "prescribed" for admission. The second method is more respectable: but it compels us to give elementary courses at the expense of the time and energy of teachers who might otherwise do better things.

THE OBSTRUCTIVE NATURE OF THE REQUIREMENT OF LATIN POETRY IN ELEMENTARY LATIN.

During the last two years, the Committee have received numerous complaints in regard to the requirement in Elementary Latin based on the fact that the requirement called for a knowledge of Latin poetry at the end of the third year of a school course, whereas most schools give no instruction in Latin poetry until the fourth year. To get a clearer understanding of the situation, the Committee addressed a letter of inquiry to the schools in the North Central Association of Colleges and Secondary Schools, asking to what extent instruction in Latin poetry was given previous to the last year of the school course. At about the same time, a committee of the Board of Overseers — the Committee on the Relation of the University to Secondary Schools — made a similar inquiry of schools on the regular Harvard list, that is, the schools which have within the last ten years sent boys to Harvard. The results of both investigations were the same — that is, they both showed that in the majority of schools it was impossible for a boy to get instruction, within the regular programme, which enabled him to take our examination in Elementary Latin. Out of eighty-six schools on the Harvard list, only twenty-two found no difficulty with the present requirement; and of these twenty-two schools nineteen were in

Massachusetts, and only one was outside New England. Sixty-four schools replied that they were unable to adjust their programmes to the Harvard requirement, and that they believed it would be greatly to their advantage and to that of the College if the College made it possible for a boy to take a preliminary examination in Latin which did not include Latin poetry. Among the schools in the North Central Association, fifty-seven replied that they gave instruction in Latin poetry before the last school year; one hundred and forty-seven replied that they did not give instruction in Latin poetry until the last year. From the replies made by many of those who do give instruction in Latin poetry before the last year, it seemed probable that they read too little poetry to enable a boy to meet our requirement, though they give more instruction in Cicero than our requirements call for. The objections made by the schools to the Harvard requirement may be summarized as follows: —

> That as the Harvard requirement is different from that of every other college, it compels boys who are going to Harvard to secure a different treatment, and puts undue emphasis on examinations.
>
> That it is impossible for schools which send but few boys to Harvard to provide, within the regular programmes, for the different treatment which is necessitated by the requirement.
>
> That on account of this differentiation in requirements, early in a school course good boys are turned to other colleges.

As a result of these inquiries, the Faculty, on recommendation of the Department of the Classics, has, since this report was begun, changed the definition of Elementary Latin.

The history of this requirement in Elementary Latin is very instructive with respect to the defects in our present system. For years, a single Department has seriously checked resort to the University by setting examinations at variance with the programmes of schools throughout the country. Granted that the Department is right in its theory, nevertheless in making that theory part of our system of admission we took a very effective means of making ourselves provincial. This requirement in Latin peculiar to Harvard was encountered by boys a year before they came to College, when the hold of the College upon them was weakest. They found then that through no fault of their own they could not take an examination essential to their plan of admission. Naturally, many of them went elsewhere. The chief difficulty created by this requirement in Latin has now been removed, though the definition is still at fault, I think, in that it prescribes examinations which depart considerably from the Harvard system of making examinations tests of power rather than mere tests of knowledge of specific things. The lesson to be derived from our experience with Elementary Latin is that all our definitions should be carefully compared with school programmes, and with other college definitions of examination subjects, with a view to removing from them any peculiarities that simply obstruct without testing capacity, and also any prescriptions which interfere with the liberty of schools in preparing boys for college work.

The difficulties caused by the requirement in Elementary Latin constitute only one of the problems with which the Committee have dealt, though unhappily the others are not so near solution. Through their experience, they have become aware that our system of admission is essentially local in character, and therefore not altogether efficient as a means of selecting the best boys for the College, irrespective of the part of the country they live in, and the kind of school they have attended; that our use of our admission examinations to influence and prescribe school programmes, and to determine the character of our degrees as well as to select students, tends very greatly to narrow the field within which we can select our students, and is responsible for serious evils which tend to lower scholarship both in school and in college; that if we are to maintain the present "point" system, the ratings given to ancient and modern languages need readjustment; that one practical effect of our system is that it encourages boys to acquire "points" or numbers of subjects irrespective of doing anything well, for to pass eleven examinations, all with the grade of D—, will advance a man farther towards his degree than to pass nine examinations with grade A; and that the bad effects of this last characteristic are greatly intensified by the fact that certain examinations are deliberately made very difficult but are marked on a very low standard. These are some of the aspects of our system of admission which provide the Committee with problems for the solution of which they can as yet only look forward with hope, tempered by a knowledge of the great difficulty of making changes in a system so intricately bound up with special interests. As I hope I have suggested by the account above, we are at present in many ways hampered by a system of admission ill-adjusted to present conditions. Our regulations retain the character produced by conditions prevailing at a time when the relationship between Harvard and the schools from which her students came was much closer than it is at present, and when students mainly continued in College the subjects they had begun in the secondary school. This close relationship no longer exists. The College is now rightly of relatively less importance among the influences which form the programmes of secondary schools than the needs of the communities in which the schools are situated; and it is characteristic of boys entering College to turn to new fields of instruction. We need a scheme of admission requirements so broad and so flexible that it will serve as a means of selecting for the College the best boys from all parts of the country. To get such a scheme, we must be willing to recognize a great variety of school programmes, and to abandon absolutely all attempts to prescribe the way subjects shall be taught, using our examinations not as a means of prescribing school programmes or as a means of determining the character of our degrees, but simply as a means of testing fitness for admission.

J. G. HART,
Chairman of the Committee on Admission.

TABLE I.

Illness Report, 1906–07.

Diseases.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	Total.
Appendicitis	..	4	4	1	4	1	5	4	1	3	27
Asthma	..	2	1	..	4	2	1	2	..	..	12
Bronchitis	..	1	7	7	5	6	10	11	5	4	56
Chicken-pox	1	..	..	3	..	1	..	..	2	..	7
Colds — unclassified	..	7	16	27	9	27	35	16	15	2	154
Coryza	..	..	..	1	..	3	4	..	1	1	10
Diarrhoea	..	2	..	..	2	1	..	2	..	1	8
Diphtheria	..	1	..	..	2	..	1	..	..	..	4
Ear, of the	..	1	3	2	3	1	7	5	..	1	23
Eye, of the	..	7	8	8	6	5	15	13	6	2	65
General Debility	..	12	14	9	5	15	3	2	12	3	75
Headache	..	1	1	..	3	1	1	1	1	..	9
Heart, of the	..	..	..	..	1	2	1	1	..	..	5
Indigestion	1	12	12	10	7	10	10	7	8	4	81
Insomnia	..	2	2	2	..	1	1	3	..	..	11
Jaundice	1	10	5	..	6	5	3	1	6	1	38
La Grippe	..	4	14	33	63	50	46	22	18	1	251
Laryngitis	..	1	..	2	1	..	3	2	1	..	10
Malaria	1	3	..	1	..	1	1	..	3	..	10
Measles	..	..	1	..	..	1	4	5	6	1	18
Miscellaneous	4	18	10	13	14	14	18	22	15	7	135
Mumps	..	1	..	..	1	1	1	11	13	1	29
Nephritis	..	2	2	..	2	2	..	..	..	..	8
Neuralgia	..	3	3	2	3	..	1	1	..	..	13
Pertussis	..	..	..	..	..	4	3	3	..	..	10
Pharyngitis	1	1	3	2	4	8	13	1	5	..	38
Pleuritis	..	1	..	1	1	..	1	..	2	1	7
Pneumonia	..	..	..	1	..	1	..	..	..	1	3
Rheumatism	..	2	5	2	3	1	4	6	2	1	26
Scarlet Fever	..	1	..	..	7	..	..	..	1	..	9
Skin, of the	..	1	4	2	3	5	3	1	..	..	19
Surgical	3	41	43	31	24	40	40	44	18	10	294
Teeth, of the	..	1	1	2	4	3	2	3	1	..	17
Tonsilitis	2	6	11	13	13	16	25	15	30	2	133
Tuberculosis	..	3	2	..	..	..	..	..	..	..	5
Typhoid	..	3	..	..	..	..	..	..	..	..	3
Totals	14	154	172	170	200	228	262	204	172	47	1623
Visits	6	130	231	165	198	211	199	178	172	99	1589
Office consultations, medical	21	136	253	247	274	302	431	270	273	121	2328
Office consultations, surgical	13	304	131	102	73	104	120	92	91	74	1104
Total number of consultations	40	570	615	514	545	617	750	540	536	294	5021

Cases not seen by the Medical Visitor 547

TABLE II.

Illness Report as Related to the different Schools.

Diseases.	College.					Scientific.				Law.	Graduate.	Divinity.	Totals.
	1	2	3	4	Sp.	1	2	3	4				
Appendicitis	3	6	5	2	4	..	1	..	..	4	2	..	27
Asthma	1	5	..	5	..	..	..	1	..	..	..	..	12
Bronchitis	18	10	12	7	6	1	1	..	1	..	..	..	56
Chicken-pox	2	1	1	1	..	..	..	..	..	..	2	..	7
Colds, unclassified	58	36	23	9	9	1	2	1	..	8	6	1	154
Coryza	4	1	2	..	1	..	..	1	..	1	..	..	10
Diarrhoea	4	1	..	2	1	..	..	..	..	..	..	..	8
Diphtheria	1	1	1	1	..	..	..	..	..	..	..	..	4
Ear, of the	7	7	5	4	..	..	..	..	..	..	..	..	23
Eye, of the	22	27	7	..	7	..	..	..	..	2	..	..	65
General Debility	18	12	10	9	12	..	..	..	1	6	5	2	75
Headache	5	..	2	1	..	..	..	..	..	1	..	..	9
Heart, of the	..	1	..	..	3	..	..	..	..	1	..	..	5
Indigestion	19	20	9	5	9	2	1	2	..	10	4	..	81
Insomnia	2	3	..	2	1	..	..	..	..	1	2	..	11
Jaundice	13	11	8	5	1	..	..	..	..	..	..	..	38
La Grippe	60	71	36	27	15	4	2	3	..	22	9	2	251
Laryngitis	3	1	2	..	1	..	..	1	1	1	..	..	10
Malaria	2	5	1	..	1	..	..	..	..	1	..	..	10
Measles	7	3	2	2	..	1	1	..	..	..	2	..	18
Miscellaneous	30	38	19	10	14	..	1	1	..	16	5	1	135
Mumps	13	5	..	1	3	..	..	1	..	6	..	..	29
Nephritis	1	3	1	..	2	..	..	1	..	..	..	..	8
Neuralgia	2	4	4	..	2	..	..	..	..	1	..	..	13
Pertussis	4	..	5	..	1	..	..	..	..	..	..	..	10
Pharyngitis	13	11	6	3	3	..	..	..	..	1	1	..	38
Pleuritis	2	1	2	1	..	..	..	..	..	..	1	..	7
Pneumonia	1	..	1	..	..	..	..	..	..	1	..	..	3
Rheumatism	5	8	5	4	2	..	..	..	..	2	..	..	26
Scarlet Fever	2	3	2	1	1	..	..	..	..	..	..	..	9
Skin, of the	2	4	4	2	2	..	..	..	..	3	1	1	19
Surgical	86	90	43	23	10	1	1	..	2	33	5	..	294
Teeth, of the	5	6	3	1	2	..	..	..	..	..	..	..	17
Tonsilitis	33	31	24	22	9	2	3	1	1	6	1	..	133
Tuberculosis	2	..	..	..	1	..	1	..	..	1	..	..	5
Typhoid	..	1	..	1	..	..	..	..	..	..	1	..	3
Totals	450	427	245	151	123	12	14	13	6	128	47	7	1623
No. of Students	605	633	418	328	263	45	68	35	56	697	416	39	
% of "Sign-offs"	74	67	58	46	46	26	19	34	10	18	11	17	
No. of Students cared for at Infirmary	78	84	74	55	23	1	5	8	4	95	33	1	
% of "Sign-offs"	12	13	17	16	8	2	7	22	9	13	7	2	

TABLE III.

STILLMAN INFIRMARY.

List of Cases, 1906–07.

Abscess peritonsillar	**3**	**Measles**	**9**
" miscellaneous	**11**	**Miscellaneous Medical**	**49**
Adenitis	**3**	**" Surgical**	**56**
Appendicitis	**22**	**Mumps**	**13**
Bronchitis	**12**	**Nervous Exhaustion**	**5**
Carbuncle	**2**	**Otitis Media**	**4**
Cerebro-spinal Meningitis	**1**	**Peritonsilitis**	**1**
Chicken-pox	**4**	**Pertussis**	**2**
Colds — unclassified	**35**	**Pharyngitis**	**4**
Concussion — cerebral	**6**	**Pleuritis**	**3**
Diphtheria	**2**	**Pneumonia**	**2**
Erysipelas — facial	**2**	**Rheumatism**	**12**
Fracture — tibia and Fibula	**1**	**Scarlet Fever**	**5**
Gastro enteritis	6	Sepsis	18
Hernia, double inguinal	1	Synovitis of knee	11
" left "	1	Tonsilitis	41
" right "	1	Tuberculosis — pulmonary	1
Jaundice	8	Typhoid Fever	2
La Grippe	89	No diagnosis	11
Laryngitis	3		
Malaria	5	Total	467

Room patients	99
Ward patients	368
Total	467

Discharged — well	311
" relieved	150
" not relieved	2
" to Waverley	1
" to Rutland	1
" to Miss Copp's Hospital	1
Died	1
Total	467

Total number of hospital days	3,274
Daily average	11.9

Total number of operations	65
Operations for Appendicitis	15

ORDINARY DEGREES CONFERRED, 1903–07.

	1903.	1904.	1905.	1906.	1907.
Bachelors of Arts	511	459	427	374	448
Bachelors of Arts out of course	42	38	44	52	63
Bachelors of Science	101	77	91	62	79
Bachelors of Science out of course	5	7	16	13	17
Bachelors of Divinity	4	7	7	6	7
Bachelors of Divinity out of course	1	1	0	0	0
Bachelors of Laws	157	169	170	178	183
Bachelors of Laws out of course	6	13	13	13	23
Bachelors of Agricultural Science	6	3	1	2	6
Bachelors of Agricultural Science out of course	0	0	0	0	2
Doctors of Medicine	109	131	82	80	70
Doctors of Medicine out of course	3	4	2	1	0
Doctors of Dental Medicine	27	25	32	34	24
Masters of Arts	117	157	131	110	124
Masters of Arts out of course	8	5	12	4	8
Masters of Science	6	2	4	3	2
Masters of Science out of course	1	0	1	0	0
Doctors of Philosophy	28	46	39	46	33
Doctors of Science	1	1	0	0	1
Metallurgical Engineer	0	0	1	0	0
Mining Engineer	0	0	0	3	1
Masters in Civil Engineering	0	0	0	0	2
Masters in Architecture	0	0	0	0	2
Master in Landscape Architecture	0	0	0	0	1
Masters in Forestry	0	0	0	0	2
Totals	1133	1145	1073	981	1098

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HARVARD UNIVERSITY

TREASURER'S STATEMENT

1906-07

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TREASURER'S STATEMENT FOR 1906–07.

TO THE BOARD OF OVERSEERS OF HARVARD COLLEGE:—

The Treasurer submits the annual statement of the financial affairs of the University, for the year ending July 31, 1907.

The net income of the general investments was divided at the rate of 4.91 per cent., except in the following cases, among the Funds and balances to which these investments belong. The exceptions are some temporary balances which were allowed lower rates of interest, and the balance called "Gains and Losses for General Investments," which, in accordance with the vote quoted below, was allowed no interest. The rate compared with that for 1905–06 shows an increase of 0.17 per cent. The income remaining after the above division, $1,099.17, is held for division with the income of the following year. Formerly such remainders were credited to the University account.

From the income of all bonds bought at a premium for general investments $8,943.72 was credited to the respective investment accounts, and for special investments $784.07, as the fair yearly repayment to make good the whole of the premiums at the maturity of the bonds.

The gains, amounting to $3,987.07, and the losses, amounting to $1,600.00, during the year, from the sale of securities held as general investments, were carried to "Gains and Losses for General Investments" in accordance with the following vote of the Corporation, of October 26, 1891:—

> "*Voted*, that the sum of $23,341.97 being the net gain from sales of bonds at a profit, heretofore credited to the account of Railroad Bond Premiums, be transferred as of July 31, 1891, to a new account to be called 'Gains and Losses for General Investments,' which account shall be credited with all gains and charged with all losses hereafter arising from sales of property belonging to the general investments. As this account belongs pro rata to all the Funds sharing in general investments it is not to be allowed interest when its balance is on the credit side nor to be charged with interest when its balance is on the debit side."

Its credit balance July 31, 1907, was $601,356.70.

The gains from the sale of property held as special investments, amounting to $118.75 during the year, and the losses amounting to $5.00, were carried to the accounts of the Funds the investments of which were sold.

Aid to students, in the form of fellowships, scholarships and loans, amounted during the year to $125,915.63.

SUMMARY OF INVESTMENTS.

(For details, see pp. 52 and 57.)

General Investments.	Principal, Aug. 1, 1906.	Principal, July 31, 1907.	Income.
Mortgages, Notes, &c.,	$1,310,000.00	$1,060,000.00	$71,610.17
Public Funds,	108,584.55	106,584.55	4,727.02
Railroad Bonds,	5,147,001.67	5,388,335.47	211,575.25
Traction Bonds,	1,584,641.14	1,576,484.07	68,405.86
Sundry Bonds,	2,340,487.61	2,571,699.23	105,760.38
Railroad Stocks,	1,121,817.18	1,503,286.20	55,454.50
Manufacturing and Telephone Stocks,	473,062.77	407,585.41	25,574.00
Real Estate Trust Stocks,	695,421.60	695,421.60	25,936.50
Sundry Stocks,	132,107.00	233,169.50	6,000.00
Real Estate,	2,424,720.45	2,836,110.24	179,484.61
Advances to			
Antitoxin Laboratory,		404.89	.94
Bussey Trust.	345,217.07	348,227.21	13,939.10
Calvin & Lucy Ellis Real Estate,	345.31	402.02	17.27
William Hayes Fogg Art Museum,	93.68		4.68
Emerson Hall,	3,368.81		
Dental School Real Estate,	87.58	87.58	
Medical School,	5,553.39	6,373.03	277.67
" " Real Estate,	106.69		
" " Undertaking,	1,183,526.43		57,617.74
Observatory,	5,466.59	1,024.63	273.33
Peabody Museum of American Archaeology and Ethnology,	2,117.79	2,774.22	95.30
Botanic Department,	8.990.78	7,352.39	449.54
Harvard Dining Association,	180,792.13	173,295.30	8,161.77
Randall Hall Association,	31,202.27	29,702.27	1,560.12
Uriah A. Boyden Fund,	5,735.53	9,030.62	
Classical Publication Fund of the **Class of 1856**,	1,505.58	1,750.82	75.28
Woodland Hill Fund,	2,543.63	2,875.65	127.18
Stadium,	48,665.32	31,019.13	2,353.81
Sundry Accounts,	4,254.89	1,895.66	
Term Bills overdue,	50,966.46	58,858.99	
Amounts carried forward,	$17,218,383.90	$17,053,750.68	$839,482.02

SUMMARY OF INVESTMENTS (*continued*).

General Investments.	Principal, Aug. 1, 1906.	Principal, July 31, 1907.	Income.
Amounts brought forward, . .	$17,218,383.90	$17,053,750.68	$839,482.02
Cash in City Trust Co., ...	40,342.41	80,132.02	1,483.86
" Equitable Trust Co., ...	3,311.42	697.65	972.60
" Merchants National Bank, .	10,483.64	908.71	147.14
" National Shawmut Bank, . .	180.52		
" National Union Bank, . . .	1,517.37	1,547.29	29.92
" Old Boston National Bank, .	29,491.67	65,580.93	1,543.95
" hands of Bursar, ...	40,518.71	30,232.67	
Totals, General Investments,	$17,344,229.64	$17,232,849.95	$843,659.49
Special Investments (p. 61),	2,633,682.07	2,659,799.97	101,517.15
Totals of all investments, . .	$19,977,911.71	$19,892,649.92	$945,176.64

CHANGES IN FUNDS.

Total of Funds and balances, August 1, 1906, ...	$19,977,911.71
" " " July 31, 1907, ...	19,892,649.92
Decrease during the year, ...	$85,261.79

ANALYSIS OF DECREASE.

Decrease of Funds and balances.		
Funds applied to the Medical School Undertaking, by payments towards land and construction (see pp. 132–135), .		$551,820.66
Law School balance, by payments towards construction of Langdell Hall, ...		215,871.42
Sundry balances spent, mainly of gifts for special purposes,		4,496.09
Loss by changes of investments, ...		1,605.00
Henry L. Pierce (Residuary) Fund, by payment of the deficit in the combined accounts of the University, College and Library (see p. 9), ...		16,718.64
		$790,506.81
Less increase, excluding gifts for capital.		
Henry Francis Sears Fund for Pathology established with part of the proceeds of Medical School property sold (see p. 110), ...	$35,000.00	
Net increase of Funds and balances which appear at both the beginning and the end of the year, excluding the Law School balance, Funds applied to the Medical School Undertaking and the **Henry L. Pierce** (Residuary) Fund, .	91,858.44	
Increase of Funds established during the year, .	1,831.66	
Credit balances created during the year, mainly of gifts for immediate use, ...	24,025.11	
Gain by changes of investments, ...	4,105.82	156,821.03
Net decrease, excluding gifts for capital, ...		$633,685.78
Less gifts for capital, ...		548,423.99
Decrease during the year, ...		$85,261.79

INCOME AND CURRENT EXPENSES FOR DEPARTMENTS.

SUMMARIES.

These tables show for each Department the receipts available for salaries, retiring allowances and general expenses, the amount of such expenses, and the resulting surplus, or deficit. They are summaries of only these general items in the more comprehensive and detailed tables beginning on page 79.

THE UNIVERSITY.

(See Table No. I, page 79.)

Available for Expenses.

Income of Funds and balances,	$62,548.68	
Gifts,	5,454.54	
Rents,	2,810.00	
Sales and repayments,	1,434.33	$72,247.55

Payments.

Overseers' expenses,	$2,127.31	
Office expenses,	20,703.04	
Salaries,	44,829.09	
Retiring allowances,	25,462.48	
Memorial Hall and Sanders Theatre,	396.15	
Peabody Museum of American Archaeology and Ethnology (part, see Table XIV, page 124),	1,350.95	
Semitic Museum (part, see Table XV, page 125),	1,500.00	
Germanic Museum (part, see Table XVI, page 125),	75.32	
William Hayes Fogg Art Museum (part, see Table XVII, page 126),	2,927.08	
Appleton Chapel (part, see Table XIX, page 128),	6,361.22	
Phillips Brooks House (part, see Table XX, page 129),	1,857.02	
General expenses,	35,575.82	143,165.48
Deficit, excluding payment for Emerson Hall,		$70,917.93
Emerson Hall, cost of construction in excess of gifts,		3,368.81
Deficit,		$74,286.74

THE COLLEGE, INCLUDING THE LAWRENCE SCIENTIFIC SCHOOL, THE GRADUATE SCHOOL OF ARTS AND SCIENCES, AND THE GRADUATE SCHOOL OF APPLIED SCIENCE.

(See Table No. II, page 83.)

Available for Expenses.

Income of Funds and balances,	$231,007.64	
Gifts,	3,020.60	
Sales,	3,944.65	
Insurance and unspent appropriations,	405.30	
Receipts from students (except tuition fees in the School for Social Workers and Gymnasium locker fees),	601,654.66	
Sundry receipts at the summer camp at Squam Lake,	9,039.16	
Amount available for expenses, carried forward,		$849,072.01

THE COLLEGE, CONTINUED.

Amount available for expenses, brought forward, . . .		$849,072.01

PAYMENTS.

Salaries for instruction, ...	$523,572.76	
Salaries for administration, ...	15,733.33	
Appropriations, ...	41,939.48	
Scholarships from unrestricted income, ...	4.440.00	
Expenses on account of public buildings, ...	30,026.89	
Expenses on account of dormitories, ...	42,150.21	
Summer Schools, ...	34,382.24	
Museum of Comp. Zoölogy (part, see Table XIII, p. 123),	4,227.00	
Jefferson Physical Lab. (part, see Table XVIII, p. 127),	665.96	
Hemenway Gymnasium (part, see Table XXI, p. 130), .	6,749.90	
General expenses, ...	71,341.17	775,228.94
Surplus, ...		$73,843.07

THE LIBRARY.

(See Table No. III, page 103.)

AVAILABLE FOR EXPENSES.

Income of Funds and balances, ...	$32,387.87	
Gifts, ...	1,453.00	
Fees, ...	90.00	
Sales, ...	3.43	$33,934.30

PAYMENTS.

Salaries, ...	$18,900.00	
Services, cataloguing, administration, etc., ...	19,758.39	
Services in Department Libraries, ...	1,225.75	
General expenses, ...	10.320.13	50,204.27
Deficit, ...		$16,269.97

UNIVERSITY, COLLEGE, AND LIBRARY.

COMBINED ACCOUNTS.

University deficit as above, ...	$74,286.74
Library " "	16,269.97
	$90,556.71
College surplus as above, ...	73,843.07
Deficit in the combined accounts, which was paid by principal from the Henry L. Pierce (Residuary) Fund, ...	$16,713.64
In 1905–06 there was a deficit of	$59,296.31
Principal of the Henry L. Pierce (Residuary) Fund, July 31, 1907,	$161,470.07

DIVINITY SCHOOL.

(See Table No. IV, page 106.)

Available for Expenses.

Income of Funds and balances,	$25,311.60	
Gifts,	1,451.07	
Sales,	65.05	
Receipts from students,	9,977.45	
Sundries,	120.00	$36,925.17

Payments.

Salaries for instruction,	$28,346.59	
Salaries for administration,	1,750.00	
Books,	389.07	
General expenses,	6,542.31	37,027.97
Deficit,		$102.80
In 1905–06 there was a deficit of	$4,722.73	
The Divinity School credit balance on July 31, 1907, was	$6,261.20	

LAW SCHOOL.

(See Table No. V, page 108.)

Available for Expenses.

Income of Funds and balances,	$27,896.75	
Sales,	6.50	
Receipts from students,	102,880.00	$130,783.25

Payments.

Langdell Hall, construction,	$246,417.40	
Salaries for instruction,	53,475.00	
Salaries for administration,	11,811.91	
Scholarships from unrestricted income,	5,250.00	
Books,	14,670.83	
General expenses,	14,444.19	346,069.33
Deficit, caused by the payment of $246,417.40 towards the cost of Langdell Hall, from accumulated and current income,		$215,286.08
Otherwise there would have been a surplus of	$31,131.32	
In 1905–06, after the payment of $16,530.25 towards the cost of Langdell Hall, from current income, there was a surplus of	$24,834.78	
Otherwise there would have been a surplus of	$41,365.03	
The Law School credit balance on July 31, 1907, was	$132,456.87	

MEDICAL SCHOOL.

(See Table No. VI, page 110.)

Available for Expenses.

Income of Funds and balances,	$92,300.87	
Gifts,	4,850.00	
Receipts from students,	72,924.07	
Sales,	2,297.87	
Repayments,	1,651.72	$174,024.53
Amount available for expenses, carried forward,		$174,024.53

Medical School, continued.

Amount available for expenses, brought forward,		$174,024.53
Payments.		
Salaries for instruction,	$102,625.66	
Salaries for administration,	1,870.13	
Retiring allowance,	1,000.00	
Appropriations,	18,069.87	
General expenses,	51,278.51	174,844.17
Deficit,		$819.64
In 1905–06 there was a deficit of	$11,113.96	
The Medical School debit balance on July 31, 1907, was	$6,373.03	

DENTAL SCHOOL.

(See Table No. VII, page 116.)

Available for Expenses.		
Income of Funds and balances,	$1,927.86	
Fees from Infirmary,	4,809.25	
Sales,	462.96	
Receipts from students,	12,153.54	$19,353.61
Payments.		
Salaries for instruction,	$5,437.50	
Salaries for administration,	700.00	
General expenses,	11,978.55	18,116.05
Surplus,		$1,237.56
In 1905–06 there was a surplus of	$1,611.38	
The Dental School credit balance on July 31, 1907, was	$14,195.67	

BUSSEY INSTITUTION.

(See Table No. VIII, page 117.)

Available for Expenses.		
Income of Funds and balances,	$6,856.97	
Rents,	1,335.00	
Sales,	104.42	
Board of animals,	5,491.26	
Horticultural Department receipts,	1,757.51	
Receipts from students,	4,875.00	$20,420.16
Payments.		
Salaries for instruction,	$8,400.00	
Horticultural Department expenses,	2,202.78	
General expenses,	7,912.79	18,515.57
Surplus,		$1,904.59
In 1905–06 there was a surplus of	$1,682.65	
The Bussey Institution credit balance on July 31, 1907, was	$30,731.07	

ARNOLD ARBORETUM.

(See Table No. IX, page 118.)

Available for Expenses.

Income of Funds and balance,	$16,050.93	
Gifts,	2,973.80	
Sales,	1,834.25	
Rent,	120.00	$20,978.98

Payments.

Salaries,	$4,950.00	
General expenses,	20,414.08	25,364.08
Deficit,		$4,385.10
In 1905–06 there was a surplus (from gifts) of	$479.34	
The Arboretum Construction Gifts credit balance on July 31, 1907, was	$25,000.05	

BOTANIC GARDEN AND BOTANICAL MUSEUM.

(See Table No. X, page 119.)

Available for Expenses.

Income of Funds,	$4,516.10	
Gifts,	5,177.90	
Rent,	700.00	
Sales,	500.00	
From laboratory fees,	374.63	$11,268.63

Payments.

Interest on debt,	$449.54	
General expenses,	9,180.70	9,630.24
Surplus,		$1,638.39
In 1905–06 there was a deficit of	$902.67	
The debt of the Botanic Garden and Botanical Museum on July 31, 1907, was	$7,352.39	

GRAY HERBARIUM.

(See Table No. XI, page 120.)

Available for Expenses.

Income of Funds and balance,	$3,715.30	
Asa Gray's copyrights,	814.29	
Gifts,	3,223.44	
Sales and commissions,	2,279.44	$10,032.47

Payments.

Salaries,	$4,450.00	
General expenses,	7,038.70	11,488.70
Deficit,		$1,456.23
In 1905–06 there was a surplus of	$852.31	
The Gray Herbarium credit balance on July 31, 1907, was	$278.47	

OBSERVATORY.

(See Table No. XII, page 121.)

Available for Expenses.

Income of Funds,	$33,152.40	
Gifts,	10,413.04	
Rent,	600.00	
Sales, etc.,	90.09	
Insurance awarded for loss by fire,	112.00	$44,367.53

Payments.

Salaries,	$18,000.00	
Services,	7,774.32	
Interest on debt,	273.33	
General expenses,	13,877.92	39,925.57
Surplus,		$4,441.96

In 1905–06 there was neither a surplus nor a deficit.

The debt of the Observatory on July 31, 1907, was . . . $1,024.63

MUSEUM OF COMPARATIVE ZOÖLOGY.

(See Table No. XIII, page 122.)

Available for Expenses.

Income of Funds and balance,	$30,513.30	
Use of lecture room,	700.00	$31,213.30

Payments.

Salaries,	$11,100.00	
General expenses,	27,980.69	
	$39,080.69	
Less the amount which was paid from College income (see Table No. II, page 99),	4,227.00	34,853.69
Deficit,		$3,640.39

In 1905–06 there was a surplus of $3,408.20

The Museum of Comparative Zoölogy credit balance on July 31, 1907, was $32,074.13

PEABODY MUSEUM OF AMERICAN ARCHAEOLOGY AND ETHNOLOGY.

(See Table No. XIV, page 123.)

Available for Expenses.

Income of Funds,	$6,485.68	
Gifts,	1,110.00	
Use of heating plant,	75.00	
Library fines and lost books,	1.60	$7,672.28

Payments.

Salary of Peabody Professor and Curator,	$2,371.54	
Interest on debt,	95.30	
General expenses,	7,212.82	
	$9,679.66	
Less the amount which was paid from University income (see Table No. I, page 81),	1,350.95	8,328.71
Deficit,		$656.43
In 1905–06 there was a deficit of	$136.75	
The debt of the Peabody Museum of American Archaeology and Ethnology on July 31, 1907, was	$2,774.22	

SEMITIC MUSEUM.

(See Table No. XV, page 124.)

Available for Expenses,	Nothing.

Payments.

Salary of Curator,		$500.00
General expenses,		1,000.00
Deficit, which was paid from University income (see Table No. I, page 81),		$1,500.00
In 1905–06 there was a deficit of	$1,778.82	

GERMANIC MUSEUM.

(See Table No. XVI, page 125.)

Available for Expenses.

Income of Funds,		$1,133.52

Payments.

General expenses,		$1,208.84
Deficit, which was paid from University income (see Table No. I, page 81),		$75.32
In 1905–06 there was a deficit of	$332.72	

WILLIAM HAYES FOGG ART MUSEUM.

(See Table No. XVII, page 126.)

Available for Expenses.

Income of Funds and balance,	$2,541.96	
Sales, etc.	127.43	$2,669.39

Payments.

Salary of Curator,	$500.00	
General expenses,	4,892.24	
Interest on debt,	4.68	
	$5,396.92	
Less the amount which was paid from University income (see Table No. I, page 81),	2,927.08	2,469.84
Surplus,		$199.55
In 1905–06 there was a deficit of	$568.87	
The William Hayes Fogg Art Museum credit balance on July 31, 1907, was	$105.87	

JEFFERSON PHYSICAL LABORATORY.

(See Table No. XVIII, page 127.)

Available for Expenses.

Income of Funds and balance,		$3,777.51

Payments.

General expenses,	$4,511.24	
Less the amount which was paid from College income (see Table No. II, page 99),	665.96	3,845.28
Deficit,		$67.77
In 1905–06 there was a deficit of	$152.51	
The Jefferson Physical Laboratory credit balance on July 31, 1907, was	$1,866.76	

APPLETON CHAPEL.

(See Table No. XIX, page 128.)

Available for Expenses.

Income of Funds,		$2,505.77

Payments.

Preaching and morning services,	$3,218.80	
Salaries of administrator, organist, and choir-master,	2,200.00	
General expenses,	3,448.19	8,866.99
Deficit, which was paid from University income (see Table No. 1, page 81),		$6,361.22
In 1905–06 there was a deficit of	$6,412.53	

PHILLIPS BROOKS HOUSE.

(See Table No. XX, page 128.)

AVAILABLE FOR EXPENSES.

Income of Funds,	$1,862.53	
Gift,	25.00	$1,887.53

PAYMENTS.

Salary of Secretary,	$600.00	
General expenses,	3,144.55	3,744.55
Deficit, which was paid from University income (see Table No. I, page 81),		$1,857.02
In 1905–06 there was a deficit of	$1,829.41	

HEMENWAY GYMNASIUM.

(See Table No. XXI, page 129.)

AVAILABLE FOR EXPENSES.

Fees for the use of the Gymnasium,	$98.38	
Fees for the use of Gymnasium lockers,	2,418.00	$2,516.38

PAYMENTS.

Salaries,		$5,000.00	
General expenses,		6,020.68	
		$11,020.68	
Less the following items: —			
Amount paid from Divinity School income (see Table No. IV, page 108),	$87.04		
Amount paid from Law School income (see Table No. V, page 110),	1,667.36	1,754.40	9,266.28
Deficit, which was paid from College income (see Table No. II, page 99),			$6,749.90
In 1905–06 there was a deficit of		$6,306.40	

STILLMAN INFIRMARY.

(See Table No. XXII, page 130.)

AVAILABLE FOR EXPENSES.

Income of Funds and balances,	$4,523.53	
Annual fees,	14,308.00	
Receipts from patients,	4,682.52	$23,514.05

PAYMENTS.

Services — administration, nursing, etc.,	$5,440.81	
Other expenses,	13,242.27	18,683.08
Surplus,		$4,830.97
In 1905–06 there was a surplus of	$2,934.82	

GIFTS FOR CAPITAL

ESTABLISHING NEW FUNDS OR INCREASING OLD ONES.

From an anonymous giver, $5,000, to establish the "Samuel Phillips Prescott Fay, 1798, Fund and Scholarship" in the Law School. The income is to provide a diploma in memory of Jonathan and Samuel Phillips Prescott Fay for that member of the graduating class each year who during his three years' course has shown greatest ability; and to provide assistance to a worthy student who has finished at least one full year's course.

For the Arnold Arboretum Fund, from

Massachusetts Society for Promoting Agriculture . .	$500
B. F. Keith	110
Henry P. Curtis	10
Robert H. Gardiner	25
A. Shuman	100
	$745

From the estate of John Bartlett, Cambridge, Mass., $10,000, bequeathed in the name of his wife, Hannah Staniford Willard, "to the Corporation of Harvard University, to endow a 'Willard Scholarship' in memory of Samuel Willard, Vice President of said University, her ancestor, and of Joseph Willard, President, her grandfather, and of all his descendants graduates of Harvard."

From Mrs. Arthur W. Blake, $500, to be added to the F. B. Greenough Fund for Surgical Research.

Toward the Centennial Fund for the Botanic Garden, from

Edwin H. Abbot	$50	Amount brought forward . . .	$500
Mrs. James H. Beal	100	Mrs. W. S. Fitz	100
Miss M. L. Blake	100	Miss E. F. Mason	100
Mrs. S. P. Blake	150	Miss Marian Russell	50
Miss G. G. Eaton	100	Mrs. R. S. Russell	100
Amount carried forward . . .	$500		$850

From the estate of Martin Brimmer, Boston, Mass., $50,000, bequeathed without restrictions "to the President and Fellows of Harvard College."

From Arthur T. Cabot, Samuel Cabot, and Guy C. Cabot, $6,000, to establish the James Jackson Cabot Fund in the Medical School. The income remaining after adding a certain percentage to the principal each year is preferably, but not necessarily, to be used for a scholarship "to aid and encourage practical work in scientific medicine."

From William R. Castle, securities valued at $1,000, the income to be used, first, for the purchase of books on the Hawaiian or Sandwich Islands, and second, for additions to the English department of the Library, or, failing these uses, for such other purposes as the President and Fellows shall determine.

From members of the Class of 1881, $10,596.43, to be added to the "Twenty-fifth Anniversary Fund of the Class of 1881."

From members of the Class of 1882, on the twenty-fifth anniversary of their graduation, $53,863.36, which, with the additional gifts pledged, increasing it to $100,000, shall be known as the Fund of the Class of 1882. The use of the income is unrestricted.

From Mrs. William Leander Coolidge, William Henry Coolidge, and Louis Arthur Coolidge, securities valued at $9,000, to establish the Edward Erwin Coolidge Fund. The income is "without restriction of any kind," but is preferably "to be loaned, not given, to any student or students of Harvard University."

From the estate of Robert Henry Eddy, Boston, Mass., $1.00 additional, the remainder of his unrestricted residuary bequest.

From the late Manning F. Force, Cincinnati, Ohio, through the estate of Horace Gray, Boston, Mass., $20 to be added to the Class Subscription Fund.

Toward the foundation of a Chair in German Language and Literature, from

William Denman	$250
Hugo Reisinger	100
	$350

From the estate of Edwin A. W. Harlow, Wollaston, Mass., his bequest of $9,285.48 "for assisting poor young men of excellent moral character in the Academic Department."

From friends and associates of the late Dr. John Homans, '58, of Boston, Mass., $50,000, to establish the John Homans Professorship in the Medical School.

From Francis D. Lecompte, $50,000, to establish the Walter Augustus Lecompte Professorship of Otology in the Medical School. Any surplus of income is to be devoted to the Department of Otology.

Through the Harvard Medical Alumni Association, $2,430, to establish the Harvard Medical Alumni Fund, the income of which is to be added to the principal, or applied to increase the salary of one or more of the younger instructors in the Medical School, or otherwise, in accordance with the wishes of the Association.

To establish the Newsboys' Harvard Scholarship, the income of which is to be awarded, for the student's first year only, to that one of the newsboys eligible to compete who passes the Harvard admission examinations with the highest rank, from

Miss Grace Edwards	$100.00
The Boston Newsboys' Protective Union . . .	2,567.16
	$2,667.16

From the estate of Lyman Nichols, Nahant, Mass., $10,000, for the benefit of the Medical School.

From the Committee which collected the money from the subscribers, $454.92, to be added to the book fund in honor of Professor Charles Eliot Norton, the income thereof to be "devoted to the purchase of such books as Professor Norton may suggest."

From the estate of Mrs. W. B. Potter, Boston, Mass., $50,000 and securities valued at $165, "to be used and applied in connection with the Gray Herbarium and to be called 'The Sarah E. Potter Endowment Fund.'"

From Milton Reed, securities valued at $4,000, to establish a scholarship, in memory of his father, William Reed (born at Newburyport, Mass., March 27, 1818; died at Fall River, Mass., November 7, 1894).

From two anonymous givers, $25,000, to be added, under stated conditions, to the Nelson Robinson, Jr., Fund.

From the estate of Stephen Salisbury, Worcester, Mass., $5,120, his bequest, with interest, to "Harvard College Library."

From Frederick Le Roy Sargent, $50, to be added to the Francis James Child Memorial Fund.

From more than seven hundred and sixty alumni of Harvard University, $32,238.23, as a fund "in commemoration of the long services of Professor Nathaniel Southgate Shaler, and of the great affection in which he was held by his many students and friends," with the provisions, that a memorial tablet be erected with part of the gift, and that the income of the remainder be used under stated conditions "for the benefit of the Division of Geology in support of original research and in the publication of the results of research."

From many friends of James Skillen, $10,857.39, through Reginald H. Fitz, J. Collins Warren, Herbert L. Burrell, Francis B. Harrington, Samuel J. Mixter, G. W. W. Brewster, Committee, establishing the James Skillen Memorial Fund, to secure James Skillen and Susan Skillen, his wife, an annuity during their lives; and at the death of the survivor to become one of the permanent unrestricted endowments of the Harvard Medical School.

From the estate of George Smith, St. Louis, Mo., $1,981.02 additional. The entire bequest, after accumulating to $450,000, is for building three dormitories to be named James Smith Hall, Persis Smith Hall, and George Smith Hall.

For the Teachers' Endowment Fund, $89,269 additional, from previous contributors.

From the estate of Jerome Wheelock, Worcester, Mass., $10, the fourth payment of that amount for establishing the Jerome Wheelock Fund of $100,000.

From Mrs. Edward Wigglesworth, Mrs. Henry S. Grew, Mrs. Henry Pickering, Mrs. W. Scott Fitz, Mrs. Alexander S. Porter, Jr., George Wigglesworth, and Edward Wigglesworth, $50,000, to establish the Edward Wigglesworth Professorship of Dermatology in the Medical School in memory of the late Edward Wigglesworth, M.D.

For addition to the Emperor William Fund, established in 1905–06, celebrating the twenty-fifth anniversary of His Majesty's wedding; the income being for the maintenance of the Germanic Museum; from

Anonymous	$600
Anonymous	350
Adolphus Busch	2,000
H. L. Clark	100
H. Albert Gehring	200
Germanic Museum Association	350
Paul Heine	500
Henry L. Higginson	1,000
George V. Leverett	200
Francis G. Peabody	100
George Putnam	100
Amount carried forward	$5,500
Amount brought forward	$5,500
Henry W. Putnam	50
William L. Putnam	50
A. C. Ratshesky	50
Miss Elise Richards	10
Jacob H. Schiff	1,000
William Taussig	185
Miss Mary L. Ware	50
Moses Williams	25
Robert W. Willson	50
	$6,970

The total amount of these gifts for capital account is $548,423.99, as stated also on page 46.

GIFTS FOR IMMEDIATE USE.

From an anonymous giver, $25, for the Division of Anthropology.

From Miss Abby A. Bradley, $600, to be added to the income of the William L. Bradley Fund for the Arnold Arboretum.

From Charles Allerton Coolidge, $400, to be added to the appropriation for the Department of Architecture.

From Gardiner M. Lane, $1,000, his third gift of this amount for lectures to be given under the auspices of the Department of the Classics by some well known scholar or literary man from abroad.

From Henry L. Shattuck, $50, toward meeting the general expenses of undergraduate instruction in Harvard College.

From Edwin H. Abbot, $400, in accordance with the terms of his letter of gift, to be added to the income of the Teachers' Endowment Fund.

From an anonymous giver, $1,125, to be added to income used for salaries.

From the Carnegie Foundation for the Advancement of Teaching, $5,454.54, to pay the retiring allowances granted by the Executive Committee of this Foundation to persons connected with Harvard University.

From two anonymous givers, $2,500 additional, towards furnishing Emerson Hall.

From Mrs. Emil C. Hammer, $500, for furnishing the "Common Rooms" in Conant Hall.

From Henry L. Higginson, $200 toward the cost of equipment for "Latin 10."

From James Loeb, $1,000, for the purchase of seventeen drawings in lead pencil by Turner, for the Fogg Art Museum.

Towards the addition to Gore Hall, from

C. W. Amory	$100.00
Mrs. E. D. Brandegee	250.00
Shepherd Brooks	500.00
I. Tucker Burr	100.00
Committee of the Overseers to visit the Library	4,466.33
W. H. Coolidge	250.00
Frederick P. Fish	250.00
D. P. Kimball	250.00
Amount carried forward	$6,166.33
Amount brought forward	$6,166.33
Gardiner M. Lane	566.67
James Loeb	5,000.00
Charles Lanier	1,000.00
George F. Parkman	500.00
Mrs. G. H. Shaw	500.00
Francis Shaw	500.00
Charles C. Smith	100.00
S. D. Warren	667.00
	$15,000.00

For the use of the Division of Music, from

Percy L. Atherton	$10
William P. Blake	5
F. S. Converse	10
Edward S. Dodge	20
William G. Farlow	10
Amount carried forward	$55
Amount brought forward	$55
Arthur Foote	30
Charles Peabody	10
Philip L. Spalding	45
	$140

From John E. Thayer, $500, for the Bermuda Biological Station for Research.

From R. L. Agassiz, W. E. C. Eustis, and George P. Gardner, $460, for the purchase of a seismograph for the Geological Department.

From R. L. Agassiz, $225, for the construction of the fireproof enclosure and the foundation for the seismograph to be erected in the Geological Section of the University Museum.

From an anonymous giver, $1,381.95, for the advancement of research in Physics.

From Mrs. M. Carey Lea, $100, to be added to the income of the Joseph Lovering Fund for Physical Research.

From Theodore Lyman, $150, for the salary of an Assistant in Physics.

From Joseph Lee, $500, for the School for Social Workers.

From Donald Gordon, $652, repayment, with interest, of scholarships which he received as a student in Harvard College.

From Philippe Belknap Marcou, $50, for a prize for French composition, to be called the Jeremy Belknap Prize, as a memorial to Dr. Jeremy Belknap of the Class of 1762.

Towards the travelling expenses and support at Harvard University of Chinese students in addition to the sixteen students sent by the Chinese Government in 1906–07, from

Mrs. T. J. Bowlker	$1,000
Henry L. Higginson	500
Miss Ellen F. Mason	1,000
	$2,500

From an anonymous giver, $350, for the Ricardo Prize Scholarship for 1907–08.

From an anonymous giver, $100, to be used as the income of Scholarship Funds is used.

From an anonymous giver, $500, for two Scholarships in the Department of Education.

From an anonymous giver, $200, for the benefit of a student in the Graduate School of Arts and Sciences in 1907–08.

From Mrs. C. M. Barnard, $600, her twenty-fourth yearly gift for the Warren H. Cudworth Scholarships.

From the Harvard Club of Buffalo, $200, for the Scholarship of the Harvard Club of Buffalo for 1906–07.

From the Harvard Club of Chicago, $300, for the Scholarship of the Harvard Club of Chicago for 1906–07.

From the Harvard Club of Louisiana, $208.51, for the Scholarship of the Harvard Club of Louisiana for 1906–07.

From the Harvard Club of St. Louis, $300, for the Scholarship of the Harvard Club of St. Louis for 1906–07.

From the Lawrence Scientific School Association, $150, for a Scholarship in Engineering in the summer of 1907.

From James H. Hyde, $600, for the Fellowship of the Cercle Français de l'Université Harvard for 1906–07.

From the Boston Newsboys' Protective Union, $50, to be added to the income of the Newsboys' Scholarship, so that the holder in 1906–07 might receive the full annual stipend of $150.

For the South End House Fellowship, from

Julian L. Coolidge	$100
Edward W. Grew	25
Randolph C. Grew	100
Edward J. Holmes	100
John F. Moors	25
	$350

From Howard P. Arnold, $50, for the benefit of the Library.

For the purchase of books on the following subjects for the College Library, from

WITHOUT RESTRICTION.	
Saturday Club, Boston, Mass.	$1,000.00
Alain C. White	250.00
ENGLISH HISTORY IN THE SEVENTEENTH CENTURY.	
Charles Francis Adams	50.00
Arthur T. Lyman	25.00
Mrs. Daniel Merriman	50.00
William G. Peckham	100.00
William Woodward	25.00
DUTCH HISTORY, FOR THE JOHN LOTHROP MOTLEY COLLECTION.	
Anonymous	50.00
FRENCH HISTORY, GERMAN HISTORY, MOROCCO, TURKEY, ETC.	
Archibald Cary Coolidge	250.00
ENGLISH LITERATURE AND HISTORY.	
Ernest Blaney Dane	5,000.00
ENGLISH LITERATURE OF THE SEVENTEENTH AND EIGHTEENTH CENTURIES.	
Frank Graham Thomson	200.00
Edgar H. Wells	53.48
"THE SPECTATOR," A SET OF THE ORIGINAL NUMBERS.	
W. R. Castle, Jr.	62.50
G. L. Kittredge	50.00
C. G. Osborne H. E. Widener	75.00
FOLK-LORE.	
G. L. Kittredge	20.00
Edwin Stanton Mullins	50.00
Amount carried forward	$7,310.98

FOR BOOKS FOR THE COLLEGE LIBRARY (*continued*).

Amount brought forward	$7,310.98
MOLIÈRE COLLECTION.	
Horace B. Stanton	25.00
FRENCH PLAYS.	
F. C. de Sumichrast	15.00
GERMAN DRAMA.	
Ellis L. Dresel	50.00
OCEANIC LINGUISTICS.	
Anonymous	25.00
SHAKESPEARE.	
Walter W. Naumberg	100.00
CATACOMBS AND CHRISTIAN ARCHAEOLOGY.	
John Harvey Treat	200.00
CHINA.	
Harold J. Coolidge	50.00
CUBA.	
E. de C. Zanetti	150.00
DUTCH EAST INDIES.	
Anonymous	50.00
Mrs. Edwin A. Hills	50.00
George E. Hills	25.00
FLORENCE.	
W. Bayard Cutting, Jr.	50.00
KOREA.	
Edwin V. Morgan	16.77
LONDON.	
William Phillips	100.00
MEXICO.	
Lucius C. Tuckerman	50.00
PARIS.	
Lawrence S. Butler	50.00
EARLIER LITERATURE OF ECONOMICS.	
W. H. Gratwick	50.00
F. W. Taussig	30.00
Charles G. Washburn	25.00
"LABOR PERIODICALS."	
James Loeb	100.00
Amount carried forward	$8,522.75

For BOOKS FOR THE COLLEGE LIBRARY (*continued*).

Amount brought forward	$8,522.75
PERIODICALS ON BANKING, TO COMPLETE FILES.	
Anonymous	2.00
Thomas P. Beal	25.00
Arthur T. Lyman	50.00
John F. Moors	25.00
Moses Williams	10.00
Robert Winsor	25.00
PERIODICALS FOR THE STILLMAN INFIRMARY.	
Howard P. Arnold	10.00
FOR SUNDRY SPECIAL BOOKS.	
Anonymous	25.00
Charles K. Bolton	2.16
George B. Weston	8.40
FOR BINDING BOOKS.	
J. H. Clark	124.20
	$8,829.51

From Mrs. George A. Nickerson, $200, her fourth yearly gift in memory of her husband, George Augustus Nickerson, A.B. 1876, LL.B. 1879, for the purchase of books on folk-lore, for the College Library.

Toward providing additional service at the College Library, from

Howard P. Arnold	$50
George Blagden	50
Archibald Cary Coolidge	1,250
James J. Higginson	200
Edward King	100
Ogden Mills	100
Arthur M. Sherwood	25
	$1,775

From members of the Class of 1879, $40, for the Department of Economics, to purchase books for the working library founded by this Class.

From Philip Cabot, $24.91, to defray the cost of binding certain books in the Philosophical Library.

From Edward C. Moore, $4.07, to complete the set of the Theologische Literaturzeitung in the Divinity Library.

From the Society for Promoting Theological Education, $1,447, "for the purchase of books for the Library of the Divinity School and for the administration of said Library."

From Mrs. T. J. Bowlker, $25, for the purchase of books for the Social Service Library of Phillips Brooks House.

For purchasing volumes to complete serials in the Library of the Peabody Museum of American Archaeology and Ethnology, from

Henry W. Haynes	$100
Charles Peabody	25
	$125

For the purchase of reprints of Contributions from the Zoölogical Laboratory, from

Arthur A. Carey	$25
Dudley L. Pickman	50
	$75

Toward the cost of publishing Harvard Psychological Studies, Volume II, from

Anonymous	$6.02
Joseph Lee	350.00
Reginald C. Robbins	450.00
William R. Warren	300.00
	$1,106.02

Toward the cost of publishing a thesis on Railroad Reorganization, from

James Loeb	$100
Arthur T. Lyman	100
Sumner B. Pearmain	50
Jacob H. Schiff	250
	$500

From K. G. T. Webster, $53, to defray the expense of keeping the libraries in Warren House open in the evening from the middle of April to the end of the term.

For the Botanic Garden and Botanical Museum, from

Anonymous	$500.00
Anonymous	1,000.00
Anonymous	1,127.90
Arthur F. Estabrook	1,000.00
Miss Caroline L. W. French	100.00
Walter Hunnewell	800.00
Miss Mary Lee Ware	650.00
	$5,177.90

For the Gray Herbarium, from

R. L. Agassiz	$10.00
Thomas Allen	10.00
James Barr Ames	10.00
Miss Mary S. Ames	10.00
Anonymous	1,000.00
Anonymous	25.00
Howard P. Arnold	50.00
E. F. Atkins	10.00
Walter C. Baylies	10.00
W. S. Bigelow	10.00
Mrs. Arthur W. Blake	10.00
W. P. Blake	10.00
James C. Braman	5.00
Mrs. John L. Bremer	10.00
Edward M. Brewer	10.00
William Brewster	10.00
Addison Brown	10.00
Harold Haskell Brown	10.00
Stephen Bullard	10.00
Mrs. William S. Bullard	10.00
Allston Burr	10.00
H. D. Chapin	10.00
Charles F. Choate	10.00
Miss Cora H. Clarke	10.00
Miss Louise H. Coburn	10.00
Mrs. C. A. Cummings in memory of F. H. Cummings	10.00
Mrs. Charles P. Curtis	10.00
Henry P. Curtis	10.00
Louis Curtis	10.00
Samuel B. Dana	10.00
N. H. Daniels	10.00
Frank A. Day	25.00
Walter Deane	15.00
George Dexter	10.00
William S. Dexter	30.00
Miss Georgiana G. Eaton	10.00
William Endicott	10.00
William Endicott, Jr.	25.00
J. S. Fay, Jr.	25.00
Mrs. J. N. Fiske	10.00
Mrs. W. H. Forbes	3.00
Francis A. Foster	10.00
Francis C. Foster	10.00
Mrs. Francis C. Foster	10.00
Miss Harriet E. Freeman	10.00
Miss Cornelia A. French	10.00
Amount carried forward	$1,563.00
Amount brought forward	$1,563.00
Robert H. Gardiner	10.00
George A. Goddard	10.00
Mrs. Asa Gray	185.44
Miss Harriet Gray	10.00
Mrs. Henry S. Grew	10.00
Edward Everett Hale	5.00
George W. Hammond	20.00
Mrs. Augustus Hemenway	10.00
Miss Clara Hemenway	10.00
Miss A. P. Henchman	10.00
J. P. B. Henshaw	10.00
Miss Rose Hollingsworth	2.00
Robert C. Hooper	10.00
Clement S. Houghton	10.00
Henry S. Howe	10.00
Charles W. Hubbard	10.00
Mrs. Arthur Hunnewell	50.00
H. S. Hunnewell	10.00
Walter Hunnewell	10.00
William A. Jeffries	10.00
Charles W. Jenks	10.00
Bernard Jenney	10.00
Edward C. Johnson	10.00
F. L. Kennedy	10.00
Charles A. Kidder	10.00
Mrs. Henry P. Kidder	3.00
David P. Kimball	10.00
Mrs. David P. Kimball	10.00
Henry H. Kimball	10.00
Lemuel C. Kimball, Jr.	10.00
The Misses Kimball	10.00
E. D. Leavitt	10.00
George C. Lee	10.00
George V. Leverett	25.00
Mrs. George Linder	10.00
Augustus P. Loring	10.00
Miss Katharine P. Loring	10.00
Miss Louisa P. Loring	10.00
William Caleb Loring	10.00
Mrs. William Caleb Loring	10.00
Mrs. Thornton K. Lothrop	10.00
Mrs. George G. Lowell	10.00
Arthur T. Lyman	10.00
Haslett McKim	10.00
Mrs. G. N. McMillan	10.00
Miss Ellen F. Mason	10.00
Amount carried forward	$2,243.44

For the Gray Herbarium (*continued*).

Amount brought forward	$2,243.44
Miss Susan Minns	25.00
Mrs. Samuel Torrey Morse	10.00
Nathaniel C. Nash	10.00
Grenville H. Norcross	10.00
Mrs. Otis Norcross	10.00
Mrs. Otis Norcross, Jr.	10.00
Peder Olsen	10.00
Mrs. John F. Osgood	10.00
Charles W. Parker	10.00
Miss Mary R. Peabody	10.00
Mrs. J. C. Phillips	25.00
Henry Pickering	10.00
Mrs. Henry Pickering	10.00
Mrs. D. L. Pickman	10.00
David Pingree	20.00
Miss Elizabeth C. Putnam	5.00
Mr. and Mrs. George Putnam	20.00
Miss Sarah E. Read	10.00
Mrs. W. H. Reed	10.00
George E. Richards	10.00
Denman W. Ross	10.00
Mrs. M. Denman Ross	10.00
Mrs. Waldo O. Ross	10.00
Mrs. Robert S. Russell	25.00
Mrs. Knyvet W. Sears	10.00
Mrs. J. Montgomery Sears	10.00
Amount carried forward	$2,563.44
Amount brought forward	$2,563.44
Francis Shaw	10.00
Mrs. G. H. Shaw	10.00
David N. Skillings	10.00
Francis Skinner	10.00
F. P. Sprague	10.00
Nathaniel H. Stone	10.00
Mrs. J. A. Swan	10.00
John E. Thayer	200.00
Miss Helen W. Tinkham	10.00
Benjamin Vaughan	10.00
C. C. Walker	10.00
Miss Caroline E. Ward	10.00
Miss Cornelia Warren	10.00
B. M. Watson	10.00
Mr. and Mrs. F. G. Webster	25.00
Stephen M. Weld	25.00
Mrs. Charles T. White	10.00
S. B. Whiting	10.00
George Wigglesworth	10.00
Miss Adelia C. Williams	10.00
E. F. Williams	100.00
John D. Williams	20.00
Moses Williams	50.00
Ralph B. Williams	50.00
Mrs. Charlotte F. Woodman	10.00
Miss Mary Woodman	10.00
	$3,223.44

From Miss Catherine H. Bond and Miss Elizabeth L. Bond, $2,500, to be added, after meeting certain charges, to the unrestricted endowment of the Observatory.

From Mrs. Henry Draper, $10,000 additional, to be spent by the Director of the Observatory in prosecuting the researches in the photography of stellar spectra with which the late Dr. Henry Draper's name is honorably associated.

From Charles S. Fairchild, $5,000, for immediate use at the Observatory.

From E. C. Pickering, $5,000, to be added to the unrestricted income of the Observatory.

From an anonymous giver, $130, for immediate use at the Peabody Museum of American Archaeology and Ethnology.

For the Peabody Museum of American Archaeology and Ethnology, from

A friend	$100
Clarence B. Moore	500
	$600

From Augustus Hemenway, $255, for a case in the Peabody Museum of American Archaeology and Ethnology.

Towards the expenses of the South American Expedition undertaken by the Peabody Museum of American Archaeology and Ethnology, from

Anonymous	$300.00
Louis J. de Milhau, on account of his offer of $15,000,	4,999.92
	$5,299.92

From Jacob H. Schiff, $10,000, for the purchase of collections for the Semitic Museum.

From friends and associates of the late Dr. John Homans,'58, of Boston, Mass., $1,554.01, for a bronze tablet in his memory, set in the Administration Building at the Medical School.

From an anonymous giver, $100, for current expenses at the Medical School.

From an anonymous giver, $600, for a teaching fellowship in Histology and Embryology for 1906–07.

From the Harvard Medical Alumni Association, $1,200, to be applied in 1906–07 to increase the salary of one or more of the younger instructors in the Medical School.

From an anonymous giver, $250, for the salary of a secretary for the Caroline Brewer Croft Fund Cancer Commission.

For salaries in the Department of Biological Chemistry, for 1906–07, from

Arthur T. Cabot	$1,000
Augustus Hemenway	1,000
Mrs. Hartman Kuhn	1,000

for 1907–08, from

Augustus Hemenway	1,000
Mrs. Hartman Kuhn	1,000
	$5,000

From five anonymous givers, $450, for the promotion of research on Diabetes Mellitus.

From James J. Putnam and Moorfield Storey, trustees, $500, for a salary and for expenses in the Department of Neuropathology.

From Miss Katherine E. Bullard, $500 additional, to be used under the direction of the Department of Neuropathology, with the approval of the President and Fellows, for the benefit and advancement of the Bullard Neuropathological Collection at the Medical School.

From W. T. Councilman and F. B. Mallory, $246.31, toward the cost of certain apparatus in the Department of Pathology.

From John C. Phillips, $5,000, to be used under the direction of the Shattuck Professor of Pathological Anatomy, the Associate Professor of Pathological Anatomy and the donor, for work in the Department of Pathology.

From Morrill Wyman, $500, for special expenses connected with the Department of Pathology.

From John S. Ames, $1,000, for the Surgical Laboratory.

For the purchase of land, the erection of buildings, or the endowment of education and research, for the benefit of the Dental School, from

Charles A. Brackett	$1,000.00
Mrs. D. M. Clapp and Howard Clapp in memory of Dr. Dwight M. Clapp	50.00
John Thomas Codman	50.00
Mrs. George W. Collard	100.00
James Longley	500.00
Charles J. Morse	100.00
Amount carried forward	$1,800.00
Amount brought forward	$1,800.00
Mrs. Mary Forbes Russell	1,000.00
J. G. W. Werner	9.00
A grateful patient of L. D. Shepard	200.00
Sixty-seven anonymous givers to the Harv. Dent. Alumni Fund	1,430.50
	$4,439.50

For construction expenses at the Arnold Arboretum, from

Albert S. Bigelow	$100
Frank A. Day	100
Charles E. Stratton	100
	$300

For exploration in Western China, on behalf of the Arnold Arboretum, undertaken by Ernest Henry Wilson, who will spend at least two years in collecting botanical specimens and seeds, and in securing photographs and other information about the plants of that country, especially the mountain flora, from

Miss Mary S. Ames	$7,000.00	Amount brought forward	$14,100.00
H. S. Hunnewell	1,000.00	Edwin S. Webster	1,000.00
Walter Hunnewell	1,000.00	F. G. Webster	1,000.00
T. E. Proctor	500.00	Stephen M. Weld	1,000.00
Mrs. J. Montgomery Sears	1,000.00	Trustees of Caroline Whitney Fund	500.00
Charles A. Stone	1,000.00		
Bayard Thayer	1,000.00	F. G. Webster, Treasurer, interest	80.42
John E. Thayer	1,600.00		
Amount carried forward	$14,100.00		$17,680.42

From the Massachusetts Society for Promoting Agriculture, $2,625, "to be expended at the Arnold Arboretum by the Director, to increase the knowledge of trees."

From Francis Skinner, $2,500, for the purchase of books for the Arboretum in memory of his father, Francis Skinner, of the Class of 1862.

From the Committee on the Regulation of Athletic Sports, $20,000, to be added to its previous gifts for improvements upon, and additions to, The Soldier's Field, to be made by said Committee, with the approval of the Corporation.

The total amount of these gifts for immediate use is $165,791.18, as stated also on page 44.

CHARLES F. ADAMS, 2D, *Treasurer.*

BOSTON, February, 1908.

General Statement of Receipts and Disbursements for the year ending

INCOME.

Interest on notes, mortgages, advances, &c.,		$159,165.94
Interest on Policies of Mass. Hospital Life Insurance Co.,		849.00
Interest on Bank Deposits.		
Deposit in American Trust Co.,	$46.15	
“ City Trust Co.,	1,524.57	
“ Equitable Trust Co.,	972.60	
“ Merchants National Bank,	147.14	
“ National Union Bank,	29.92	
“ Old Boston National Bank,	1,543.95	4,264.33
Interest on Public Funds (after deducting $187.38 for sinking premiums).		
City of Boston 3½'s of 1920,	$350.00	
Imperial Japanese 4½'s of 1925,	767.02	
Massachusetts 3½'s of 1913,	1,185.25	
“ “ “ 1916,	154.15	
“ “ “ 1935,	199.08	
“ “ “ 1938,	129.14	
United States of Mexico 4's of 1954,	3,960.00	6,744.64
Interest on Railroad Bonds (after deducting $5,003.77 for sinking premiums).		
Baltimore & Ohio 4's,	$4,000.00	
“ “ (P. L. E. & W. V. system) Ref. 4's,	4,000.00	
“ “ So. Western 3½'s,	3,500.00	
Bangor & Aroostook Ref. 4's,	5,000.00	
Burlington & Mo. River in Neb. 6's,	10,530.00	
Central Vermont 4's,	1,740.00	
Chicago, Burlington & Quincy 4's,	120.00	
“ “ “ Ill. Div. 4's,	7,977.78	
“ “ “ 3½'s,	15,243.80	
Chicago & No. Western Gen. M. 3½'s,	3,488.23	
Chicago, Rock Island & Pacific 4's,	3,920.90	
Indiana, Illinois & Iowa 4's,	4,000.00	
Kansas City, Fort Scott & Memphis 6's,	12,073.90	
Kansas City, Memphis & Birmingham Income 5's,	5,700.00	
Kansas & Missouri 5's,	2,700.00	
Lake Shore & Michigan Southern 4's,	4,000.00	
Long Island Unified 4's,	12,000.00	
Louisville & Jeffersonville Bridge 4's,	8,000.00	
Minneapolis Union 5's,	4,866.83	
Missouri Pacific 5's,	5,000.00	
Montana Central 6's,	4,859.37	
New York Central & H. R. 3½'s (L. S. & M. S. Coll.),	10,500.00	
New York Central & H. R. 3½'s (M. C. Coll.),	1,190.00	
Amounts carried forward,	$134,410.81	$171,023.91

of the Treasurer of Harvard College,
July 31, 1907.

EXPENSES.

Paid to account of expenses in the

University, as per Table I (page 79).		
Salaries, ...	$44,829.09	
Retiring Allowances, ...	25,462.48	
Peabody Museum of American Archaeology and Ethnology (part, see Table XIV, page 124),	1,350.95	
Semitic Museum (part, see Table XV, page 125),	1,500.00	
Germanic Museum (part, see Table XVI, p. 125),	75.32	
William Hayes Fogg Art Museum (part, see Table XVII, page 126), ...	2,927.08	
Appleton Chapel (part, see Table XIX, page 128),	6,361.22	
Phillips Brooks House (part, see Table XX, page 129), ...	1,857.02	
Other expenses, ...	58,802.32	$143,165.48
College, as per Table II (page 94).		
Salaries for instruction, ...	$523,572.76	
Sundry salaries, ...	15,733.38	
Expenses on College Public Buildings, which are not valued in the Treasurer's books, ...	30,026.89	
Expenses on College Dormitories which are not valued in the Treasurer's books, ...	42,150.21	
General expenses, ...	71,341.17	
Fellowships, ...	27,137.50	
Scholarships, ...	53,828.51	
Loans and other aid to students, ...	29,475.87	
Prizes and expenses, ...	3,584.00	
Museum of Comparative Zoölogy (part, see Table XIII, page 123), ...	4,227.00	
Jefferson Physical Laboratory (part, see Table XVIII, page 127), ...	665.96	
Hemenway Gymnasium (part, see Table XXI, page 130), ...	6,749.90	
Summer Schools, ...	34,382.24	
Books, from special Funds and gifts, ...	1,812.41	
Apparatus and expenses for research, from special Funds and gifts, ...	6,257.81	
Publication expenses, from special Funds and gifts, ...	5,485.50	
Sundry payments from special Funds and gifts,	18,854.29	
Appropriations for collections and laboratories,	41,939.48	917,224.83
Library, as per Table III (page 103).		
Salaries, ...	$18,900.00	
Services and wages, ...	20,984.14	
Books, ...	30,147.15	
Other expenses, ...	10,333.13	80,364.42
Amount carried forward, ...		$1,140,754.73

General Statement of Receipts and Disbursements for the year ending

INCOME (*continued*).

Amounts brought forward, ...	$184,410.81	$171,023.91
Interest on Railroad Bonds (*continued*).		
New York Central & H. R. (refunding) Gold M. 3½'s,	17.50	
New York, New Haven & Hartford 4's, ...	3,875.00	
" " " 3½'s, ...	42.25	
New York, Ontario & Western 4's, ...	7,884.13	
Norfolk & Western 1st Con. 4's of 1997, ...	20.00	
Northern Pacific–Great Northern Joint 4's, ...	18,280.00	
Oregon Short Line 5's, ...	4,583.03	
Oregon Short Line 4's, ...	4,000.00	
Pennsylvania Co. 3½'s, ...	2,555.00	
Richmond–Washington Co. 4's, ...	9,834.05	
St. Louis & San Francisco Ref. 4's, ...	4,000.00	
St. Paul, Minneapolis & Manitoba 4's, ...	7,535.91	
Southern Pacific 4's, ...	4,000.00	
Terminal R. R. Association of St. Louis 4's, . . .	8,000.00	
Union Pacific 4's, ...	18,000.00	
Wisconsin Central, Minneapolis Terminal Purchase Money M 3½'s, ...	1,750.00	228,787.68
Interest on Traction Bonds (after deducting $925.39 for sinking premiums).		
Boston & Northern 4's, ...	$6,000.00	
Central Crosstown Coll. Trust 5's, ...	6,250.00	
Interborough Metropolitan Coll. Trust 4½'s, . . .	8,987.50	
Interborough Rapid Transit 4's, ...	8,000.00	
Metropolitan West Side Elevated 4's, ...	4,000.00	
" " " Extension 4's, .	4,200.00	
Old Colony Street 5's, ...	6,000.00	
Public Service Corporation of New Jersey 5's, . .	5,000.00	
Schenectady 4½'s, ...	4,274.16	
Second Avenue 5's, ...	4,605.26	
Third Avenue 4's, ...	7,975.31	
United Traction & Electric Co. 5's, ...	4,563.63	69,855.86
Interest on Sundry Bonds (after deducting $3,611.25 for sinking premiums).		
American Bell Telephone Co. 4's, ...	$10,162.71	
American Tel. & Tel. Co. 4's, ...	8,000.00	
American Tel. & Tel. Co. 5's, ...	2,500.00	
Boston Electric Light Co. 5's, ...	4,320.51	
Broadway Realty Co. 5's, ...	10,332.05	
Butte Water Co. 5's, ...	250.00	
Chicago Edison Co. 5's, ...	5,609.60	
Chicago Junc. Railways & Union Stock Yards Co. 5's,	14,979.85	
Chicago Junc. Railways & Union Stock Yards Co. 4's,	4,000.00	
Detroit Edison Co. 5's, ...	4,908.28	
Amounts carried forward, . . .	$65,063.00	$469,667.45

of the Treasurer of Harvard College,
July 31, 1907.

EXPENSES (*continued*).

Amount brought forward, ...		$1,140,754.73
Divinity School, as per Table IV (page 107).		
Salaries for instruction, ...	$27,146.59	
Scholarships, Exhibitions, and Prizes, ...	2,224.77	
Other expenses, ...	10,139.35	39,510.71
Law School, as per Table V (page 109).		
Salaries for instruction, ...	$53,475.00	
Librarians and assistants, ...	11,136.91	
Scholarships and loans, ...	6,225.37	
Other expenses, ...	29,790.02	100,627.30
Medical School, as per Table VI (page 113).		
Salaries for instruction, ...	$92,291.66	
Fees repaid to Instructors, ...	10,934.00	
Retiring allowance, ...	1,000.00	
Fellowships, ...	2,675.00	
Scholarships, ...	4,587.50	
Expenses connected with prize, ...	12.50	
Warren Anatomical Museum, ...	1,965.12	
Books, from special Funds and gifts, ...	422.39	
Sundry payments made from special Funds and gifts, ...	16,196.04	
Laboratory appropriations, ...	16,769.87	
Other expenses, ...	54,426.89	201,280.97
Medical School Undertaking, as per Table XXIV (page 133).		
Building expenses, ...	$194,106.40	
Interest on advances to real estate, ...	14,606.81	
Other expenses, ...	237.01	208,950.22
Dental School, as per Table VII (page 116).		
Salaries for instruction, ...	$5,437.50	
Other expenses, ...	13,700.96	19,138.46
Bussey Institution, as per Table VIII (page 117).		
Salaries for instruction, ...	$8,400.00	
Other expenses, ...	10,115.57	18,515.57
Arnold Arboretum, as per Table IX (page 118).		
Salaries, ...	$4,950.00	
Books from gifts, ...	48.80	
Other expenses, ...	28,805.05	33,803.85
Botanic Garden and **Botanical Museum,** as per Table X (page 119).		
Services and wages, ...	$655.22	
Labor, ...	4,911.50	
Other expenses, ...	5,092.00	10,658.72
Amount carried forward, ...		$1,773,240.53

General Statement of Receipts and Disbursements for the year ending

INCOME (*continued*).

Amounts brought forward, . . .	$65,063.00	$469,667.45
Interest on Sundry Bonds (*continued*).		
Girard Point Storage Co. 3½'s, ...	691.53	
Laclede Gas Light Co. 5's, ...	1,000.00	
Metropolitan Tel. & Tel. Co. 5's, ...	7,500.00	
Mexican Coal & Coke Co. 5's, ...	300.00	
Minneapolis General Electric Co. 5's, ...	4,915.26	
Montreal Light, Heat and Power Co. 4½'s, ...	4,466.66	
Municipal Gas & Electric Co. 4½'s, ...	4,500.00	
New England Tel. & Tel. Co. 5's, ...	4,058.82	
Portland General Electric Co. 5's, ...	6,202.78	
Railway & Light Securities Co. 5's, ...	4,965.90	
St. Louis National Stock Yards Co. 4's, ...	6,400.00	
Seattle Electric Co. 5's, ...	7,229.17	
United Electric Securities Co. 5's, ...	2,105.36	
United States Steel Corporation 5's, ...	1,600.00	
Wood Worsted Mills 4½'s, ...	2,250.00	123,248.48
Dividends on Railroad Stocks.		
Boston & Lowell, ...	$2,880.00	
Chicago, Milwaukee & St. Paul, ...	5,302.50	
Chicago & Northwestern, ...	8,837.50	
Fitchburg, preferred, ...	1,185.00	
Great Northern, preferred, ...	6,965.00	
Manhattan, ...	4,900.00	
New York Central & Hudson River, ...	8,956.25	
New York, New Haven & Hartford, ...	3,344.00	
Northern (N. H.), ...	1,740.00	
Northern Pacific, ...	875.00	
Old Colony, ...	2,485.00	
Pennsylvania, ...	19,173.00	
West End Street, preferred, ...	208.00	66,851.25
Dividends on Manufacturing and Telephone Stocks.		
American Telephone & Telegraph Co., ...	$5,600.00	
American Smelters' Securities Co., preferred, . .	10,000.00	
Amoskeag Manufacturing Co., ...	1,320.00	
Brookside Mills, ...	87.50	
General Electric Co., ...	600.00	
Merrimack Manufacturing Co., ...	374.00	
Pacific Mills, ...	8,320.00	26,301.50
Dividends on Real Estate Trust Stocks.		
Barristers Hall Trust, ...	$3,045.00	
Boston Real Estate Trust, ...	1,260.00	
Central Building Trust, ...	100.00	
Amounts carried forward, ...	$4,405.00	$686,068.68

EXPENSES (*continued*).

Amount brought forward, ...		$1,773,240.53
Gray Herbarium, as per Table XI (page 120).		
Salaries, ...	$4,450.00	
Services and wages, ...	3,270.56	
Other expenses, ...	3,768.14	11,488.70
Observatory, as per Table XII (page 121).		
Salaries, ...	$18,000.00	
Services and wages, ...	7,774.32	
Other expenses, ...	35,112.14	60,886.46
Museum of Comparative Zoölogy, as per Table XIII (page 122).		
Salaries, ...	$11,100.00	
Services and wages, ...	3,907.80	
Sturgis Hooper Fund, salary and expenses, . .	5,140.00	
Other expenses, ...	24,072.89	
	$44,220.69	
Less amount paid from College income (see Table II, page 99), ...	4,227.00	39,993.69
Peabody Museum of American Archaeology and Ethnology, as per Table XIV (page 124).		
Peabody Professor Fund, **Peabody** Professor and Curator, ...	$2,371.54	
Services and wages, ...	3,352.80	
Fellowships and scholarships, ...	1,589.47	
Other expenses, ...	10,931.49	
	$18,245.30	
Less amount paid from University income (see Table I, page 81), ...	1,350.95	16,894.35
Semitic Museum, as per Table XV (page 124).		
Curator, ...	$500.00	
Collections, ...	4,618.29	
Excavations in Palestine, ...	2,575.00	
Other expenses, ...	1,000.00	
	$8,693.29	
Less amount paid from University income (see Table I, page 81), ...	1,500.00	7,193.29
Germanic Museum, as per Table XVI (page 125).		
General expenses, ...	$1,310.24	
Less amount paid from University income (see Table I, page 81), ...	75.32	1,234.92
Amount carried forward, ...		$1,910,931.94

General Statement of Receipts and Disbursements for the year ending

INCOME (*continued*).

Amounts brought forward,		$4,405.00	$686,068.68
Dividends on Real Estate Trust Stocks (*continued*).			
Department Store Trust,		11,250.00	
Essex Street Trust,		4,000.00	
Kimball Building Trust,		1,125.00	
Paddock Building Trust,		4,161.50	
Post Office Square Building Trust,		2,750.00	27,691.50
Dividends on Sundry Stocks.			
Calumet & Hecla Mining Co.,		$1,200.00	
Laclede Gas Light Co., preferred,		1,000.00	
Massachusetts Gas Companies, preferred,		6,000.00	
United States Smelting, Refining & Mining Co.,		700.00	8,900.00
Real Estate Investments, from rents, &c., net receipts.			
Cambridge (University Houses and Lands).			
Gross receipts,		$41,198.92	
Less Taxes,	$6,526.41		
Insurance,	908.10		
Repairs, improvements, care, &c.,	16,787.68	24,222.19	16,976.73
Boston (general investments).			
Gross receipts,		$255,880.51	
Less Taxes,	$50,441.16		
Insurance,	2,016.28		
Repairs, improvements, care, &c.,	15,781.19		
Repaid to capital,	8,157.27	76,395.90	179,484.61
Bussey real estate.			
Gross receipts,		$62,970.92	
Less Taxes,	$15,666.27		
Insurance,	1,406.17		
Interest,	13,939.10		
Repairs, improvements, care, &c.,	9,574.60		
Heat and power,	6,629.84		
Repaid to capital,	1,000.00	48,215.98	14,754.94
Sundry estates (special investments).			
Gross receipts,		$16,675.46	
Less Taxes,	$3,482.31		
Insurance,	343.80		
Interest,	8.56		
Repairs, improvements, care, &c.,	1,498.85	5,333.52	11,341.94
Amount carried forward,			$945,218.40

EXPENSES (*continued*).

Amount brought forward, ...			$1,910,931.94
William Hayes Fogg Art Museum, as per Table XVII (page 126).			
Salaries, ...		$1,000.00	
Collections, ...		741.35	
Other expenses, ...		6,896.92	
		$8,638.27	
Less amount paid from University income (see Table I, page 81), ...		2,927.08	5,711.19
Jefferson Physical Laboratory, as per Table XVIII (page 127).			
Research expenses, from Funds and gift, ...		$3,370.77	
Loan repaid, with interest, ...		1,381.95	
Other expenses, ...		4,511.24	
		$9,263.96	
Less amount paid from College income (see Table II, page 99), ...		665.96	8,598.00
Appleton Chapel, as per Table XIX (page 128).			
Salaries, ...		$5,418.80	
Choir, ...		1,600.00	
Other expenses, ...		1,848.19	
		$8,866.99	
Less amount paid from University income (see Table I, page 81), ...		6,361.22	2,505.77
Phillips Brooks House, as per Table XX (page 128).			
Salaries, ...		$700.00	
Other expenses, ...		3,144.55	
		$3,844.55	
Less amount paid from University income (see Table I, page 81), ...		1,857.02	1,987.53
Hemenway Gymnasium, as per Table XXI (page 129).			
Salaries, ...		$5,000.00	
Other expenses, ...		6,020.68	
		$11,020.68	
Less the following items: —			
Paid from College income (see Table II, page 99), ...	$6,749.90		
Paid from Divinity School income (see Table IV, page 108), . . .	87.04		
Paid from Law School income (see Table V, page 110), ...	1,667.36	8,504.30	2,516.38
Amount carried forward, ...			$1,932,250.81

General Statement of Receipts and Disbursements for the year ending

INCOME (*continued*).

Amount brought forward, ...			$945,218.40
Receipts from Students.			
Tuition fees, regular and additional courses.			
College, ...	$444,128.06		
Divinity School, ...	5,500.00		
Law School, ...	102,880.00		
Medical School, ...	61,014.07		
Dental School, ...	7,865.00		
Bussey Institution, ...	4,875.00		
School for Social Workers, ...	253.33	$626,515.46	
Tuition fees, summer courses.			
College, ...	$22,472.00		
Divinity School, ...	1,545.00		
Medical School, ...	7,698.05		
Dental School, ...	437.50	32,152.55	
Registration fees, summer courses.			
College, ...		1,564.00	
Laboratory fees.			
College, ...	$33,627.84		
Medical School, ...	3,355.95		
Dental School, ...	3,773.04		
Botanic Garden, ...	374.63	41,131.46	
Examination fees.			
College. Admission, ...	$9,395.48		
Condition, make-up, and advanced standing, .	3,483.00		
Doctor of Philosophy, .	30.00		
Medical School, ...	96.00		
Dental School, ...	27.00	13,031.48	
Graduation fees.			
College, ...	$7,840.00		
Medical School, ...	300.00	8,140.00	
Matriculation fees, Medical School, ...		460.00	
Rooms in dormitories.			
College buildings, ...	$99,678.33		
Less receipts from students, separately entered in University Houses and Lands account, ...	15,873.33		
	$83,805.00		
Divinity Hall, ...	2,925.00	86,730.00	
Library fines.			
Library, ...	$483.64		
Divinity School, ...	7.45		
Peabody Museum, ...	1.00	492.09	
Amounts carried forward, ...		$810,217.04	$945,218.40

of the Treasurer of Harvard College,
July 31, 1907.

EXPENSES (*continued*).

Amount brought forward,			$1,932,250.81
Stillman Infirmary, as per Table XXII (page 130).			
Services and wages,		$5,440.81	
Food and supplies,		6,250.46	
Other expenses,		6,991.81	18,683.08
Annuities from the following Funds.			
Advancement of Astronomical Science (1901),		$2,370.00	
" " " " (1902),		648.66	
Bussey Trust,		4,000.00	
Caroline Brewer Croft,		2,180.99	
Gurney,		1,000.00	
Henry S. Nourse,		1,000.00	
Professorship of Hygiene,		3,666.82	
James Skillen Memorial,		300.00	
George Smith,		900.00	
Alexander W. Thayer,		480.00	
Charles Wilder,		1,896.00	18,442.47
Class Funds.			
Paid the Secretary of the **Class of 1853,**		$149.00	
Paid the Secretary of the **Class of 1856,**		355.50	504.50
Sundry payments.			
Calvin and **Lucy Ellis** Fund.			
Taxes,	$121.61		
Legal services,	3.63	$125.24	
George H. Emerson Scholarship Fund. Taxes,		84.35	
Charles L. Hancock Fund, taxes on Chelsea real estate,		33.32	
Henry S. Nourse Fund, expenses,		20.00	
Daniel Williams Fund, for the benefit of the Masphee and Herring Pond Indians,		800.43	
Sarah Winslow Fund, to the Minister and the Teacher at Tyngsborough, Mass.,		221.88	
Woodland Hill Fund, taxes on Muddy River land, and other expenses,		1,332.02	
Gifts for Cuban Teachers, expenses,		52.00	2,669.24
To reimburse the Committee in charge of the Shaler Memorial gifts, for expenses,			760.23
Amount carried forward,			$1,973,310.33

General Statement of Receipts and Disbursements for the year ending July 31, 1913 (continued).

Amounts brought forward,		$[illegible]	$[illegible]
Income from Students (continued).			
Stillman Infirmary.			
Annual fees, ...	$[illegible]		
Receipts from patients, ...	[illegible]	[illegible]	
Use of Laboratories.			
Dental School, ...		[illegible]	
Use of Hemenway Gymnasium, ...		[illegible]	
Summer School excursion surplus, ...		[illegible]	$[illegible]
Sundries.			
Professorship of Hygiene from Trustees, ...		$[illegible]	
Asa Gray's copyrights, ...		[illegible]	
Trustees of George H. Emerson estate, . . .		[illegible]	
Trustees of Edward Hopkins, ...		[illegible]	
Sales of grass, wood, old material, &c., ...		[illegible]	
" old examination papers, ...		[illegible]	
" tickets to Commencement Lunch, ...		[illegible]	
" tickets to Divinity School Alumni Dinner, .		[illegible]	
" books, pamphlets, catalogues, &c., ...		[illegible]	
" plates and photographs, ...		[illegible]	
" [illegible], ...		[illegible]	
Board of horses, cattle, &c., at Bussey Institution,		[illegible]	
Use of Library by resident graduates and others, .		[illegible]	
" Gymnasium by graduates and others, . . .		[illegible]	
" Buildings and Univ. Houses and Lands, . .		[illegible]	
From instructors in the Medical School to pay for advertising summer courses, ...		[illegible]	
Fees at Infirmary, Dental School, ...		4,409.25	
Mary L. Whitney Scholarship, from the Executor of the will of C. L. B. Whitney, ...		97.50	
Engineering camp at Squam Lake, ...		9,339.16	
Fire insurance awards for loss on property not held as an investment, ...		142.00	
Loan in place of income for research in Physics,		4,250.00	
Heat and power to the House of the Good Samaritan, ...		2,347.22	50,738.98

Total amount of income, excluding gifts, . . .	$1,827,788.91
Gifts for immediate use (see page 33), ...	165,791.18
Amount carried forward, ...	$1,993,580.09

Amount brought forward, ... $[illegible]

RECEIPTS EXCLUSIVE OF INCOME

GIFTS FOR CAPITAL ACCOUNT

Samuel Phillips Prescott Fay (1798) Fund and Scholarship ...	$[illegible]	
Arnold Arboretum Fund (additional) ...	[illegible]	
Willard Scholarship Fund ...	[illegible]	
Centennial Fund for the Botanic Garden ...	[illegible]	
Martin Brimmer Fund ...	[illegible]	
James Jackson Cabot Fund ...	[illegible]	
Frances James Child Memorial Fund (add'l) ...	[illegible]	
Class Subscription Fund ...	[illegible]	
Twenty-fifth Anniversary Fund of the **Class of 1861**, ...	[illegible]	
Edward Erwin Coolidge Fund ...	[illegible]	
R. H. Eddy Bequest (additional) ...	[illegible]	
Nelson Robinson Jr. Additional Fund (add'l) ...	25,000.00	
German Professorship Fund ...	[illegible]	
F. B. Greenough Fund (Surgical Research) (additional), ...	500.00	
Edwin A. W. Harlow Fund (additional) ...	[illegible]	
John Homans Memorial Fund ...	50,000.00	
Walter Augustus Lecompte Professorship of Otology Fund, ...	50,000.00	
Boston Newsboys' Scholarship Fund ...	[illegible]	
Lyman Nichols Fund ...	10,000.00	
Charles Eliot Norton Book Fund (additional), ...	454.92	
Sarah E. Potter Endowment Fund, ...	50,165.00	
Shaler Memorial Fund ...	32,238.23	
James Skillen Memorial Fund ...	10,857.39	
George Smith Bequest (additional), ...	1,951.02	
Jerome Wheelock Fund (additional), ...	10.00	
Edward Wigglesworth Professorship of Dermatology Fund, ...	50,000.00	
Harvard Medical Alumni Fund ...	2,430.00	
Emperor William Fund, ...	6,970.00	
Teachers' Endowment Fund (additional), ...	89,269.00	
Stephen Salisbury (1905) Fund, ...	5,120.00	
Fund of the **Class of 1882**, ...	53,863.36	
William B. Castle Fund, ...	1,000.00	
William Reed Scholarship Fund, ...	4,000.00	548,423.39

Amount carried forward, ... $2,542,004.08

[illegible] (continued)

Amount brought forward, ...		[illegible]

SALES, ETC., GENERAL INVESTMENTS.

[illegible] American Tel. & Tel. Co. [illegible]		
[illegible]	[illegible]	
[illegible] Burlington & Mo. River in Neb. [illegible]		
[illegible]	[illegible]	
[illegible]	[illegible]	
[illegible]	[illegible]	
[illegible] . . .	[illegible]	
[illegible] shares American Tel. & Tel. Co.	[illegible]	
[illegible] Chicago, Milwaukee &		
St. Paul . . . . [illegible]		
Less transfer tax . . [illegible]	[illegible]	
[illegible] Great Northern Iron Ore Properties		
(stock dividend)	---------	
Notes paid	[illegible]	[illegible]

SALES, ETC., SPECIAL INVESTMENTS OF VARIOUS FUNDS.

Bussey Trust.		
Sale of real estate.	[illegible]	
Less commissions	[illegible]	[illegible]
Edward W. Codman Fund.		
Mortgage Note paid.		5,000.00
Price Greenleaf Fund.		
3000 Burl. & Mo. R. in Neb., non ex. 6s called		
and paid at par.	$3,000.00	
2 rights New York Central & Hudson River. .	16.35	
40 shares Great Northern Iron Ore Properties. .		
(stock dividend).	--------	
Note of Massachusetts Cotton Mills, paid. .	50,000.00	53,016.35
Henry S. Nourse Fund.		
25 shares Brookside Mills, ...		2,623.75

Amount carried forward, ...	$4,652,543.15

RECEIPTS, EXCLUSIVE OF INCOME, continued.

Amount brought forward,			$4,652,543.15

REPAYMENTS.

Harvard Dining Association.			
To reduce long period debt,	$6,706.00		
" short " "	2,030.45	$8,736.45	
Randall Hall Association, to reduce debt,		1,500.00	
Premiums on bonds, repaid in part,		9,788.79	
Advances, for accrued interest and expenses on bonds, repaid,		2,502.35	
Improvements on **Adams** Estate, repaid in part,		3,336.00	
" " **Bussey** Real Estate, repaid in part,		1,000.00	
" " **Gray** Estate, repaid in part,		4,819.27	
Loans to students, repaid,		4,459.27	
Sundry repayments,		9,946.18	
Reserved for the payment of certain bills for 1906–07 which were charged off but not paid during that year,		150.00	46,238.31
Sale of Medical School property corner of Boylston and Exeter Streets,			500,423.80
Sale of Medical School land near Longwood Avenue,			309,058.14
Net rents of Medical School real estate,			494.26
Honoraria returned,			75.00

Bursar's Sundry Accounts.		
Receipts during the year.		
On account of **Harvard** Dining Association,	$207,049.96	
" **Randall** Hall Association,	80,933.41	
On sundry accounts,	205,390.13	493,373.50
Balance, August 1, 1906.		
Cash in Adams Trust Co.,	$2,492.62	
" City Trust Co.,	40,342.41	
" Equitable Trust Co.,	3,311.42	
" Merchants National Bank,	10,483.64	
" National Shawmut Bank,	180.52	
" National Union Bank,	1,517.37	
" Old Boston National Bank,	29,491.67	
" hands of Bursar,	40,518.71	
Term Bills overdue,	50,966.46	179,304.82
Total,		$6,181,510.98

INVESTMENTS

The following account exhibits the state of the property as entrusted to the Treasurer's hands July 31, [illegible]

General Investments consist of Funds invested together; Special Investments, of Funds invested separately.

Special Investments, Summary. (For details see page [illegible].)		
Public Funds	[illegible]	
Railroad Bonds	[illegible]	
Traction Bonds	[illegible]	
Sundry Bonds	[illegible]	
Railroad Stocks	[illegible]	
Manufacturing and Telephone Stocks	[illegible]	
Real Estate Trust Stocks	[illegible]	
Sundry Stocks	[illegible]	
University Houses and Lands	[illegible]	
Business Real Estate	[illegible]	
Other Real Estate	[illegible]	
Mortgages and Notes	[illegible]	
Deposits in Massachusetts Hospital Life Ins. Co.	[illegible]	
Cash in American Trust Co.	[illegible]	
" " Old Boston National Bank	[illegible]	$2,[illegible]
General Investments.		
Mortgages and Notes.		
Mortgages	$[illegible]	
American Tel. & Tel. Co.'s Note	50,000.00	
New England Tel. & Tel. Co.'s Note	50,000.00	
Hamilton Manufacturing Co.'s Note	50,000.00	
Indian Head Mills of Alabama Note	50,000.00	
Personal Notes, with collateral	[illegible]	
Western Electric Co.'s Note	50,000.00	
York Manufacturing Co.'s Note	50,000.00	1,[illegible]
Public Funds.		
£3,000 Imperial Japanese Sterling 4½'s of 1925.	$15,334.55	
$100,000 United States of Mexico 4's of 1954,	91,250.00	106,584.55
Railroad Bonds.		
$100,000 Baltimore & Ohio 1st M. 4's of 1948.	$96,625.00	
100,000 B. & O. (S. W. Div.), 1st M. 3½'s of 1925,	89,750.00	
100,000 Baltimore & Ohio (Pittsburg, Lake Erie & West Virginia), Ref. M. 4's of 1941,	99,250.00	
125,000 Bangor & Aroostook Cons. Ref. M. 4's of 1951,	118,750.00	
125,000 Burl. & Mo. in Nebr. non ex. 6's of 1918,	128,000.00	
444,000 Chicago, Burl. & Quincy 3½'s of 1949.	456,440.09	
200,000 C. B. & Q. (Illinois Div.) 4's of 1949,	200,933.34	
100,000 Chicago & No. Western Gen. M. 3½'s of 1987,	100,947.26	
Amounts carried forward,	$1,290,695.69	$3,826,384.52

	Amount brought forward,		$9,121,094.99
Traction Bonds.			
$150,000	Boston & Northern Street R'y 1st M. Ref. 4's of 1954,	$139,000.00	
100,000	Central Crosstown Coll. Trust 5% Notes of 1909,	99,375.00	
200,000	Interborough-Metropolitan Coll. Trust 4½'s of 1956,	191,000.00	
200,000	Interborough Rapid Transit 4% Gold Notes of 1908,	195,299.38	
100,000	Interborough Rapid Transit 5% Gold Notes of 1910,	97,250.00	
100,000	Metrop. West Side Elevated 4's of 1938,	91,746.25	
100,000	" " " Ext. M. 4's of 1938,	97,000.00	
150,000	Old Colony Street R'y 1st M. Ref. 4's of 1954,	139,000.00	
100,000	Public Service Corporation of New Jersey 5% Coll. Gold Notes of 1909,	97,000.00	
100,000	Second Ave. (N. Y.) Con. M. 5's of 1948,	116,184.34	
200,000	Third Avenue (N. Y.) 1st Consol. M. 4's of 2000,	202,283.65	
100,000	United Traction & Electric Co. 1st M. 5's of 1933,	111,345.45	1,576,484.07
Sundry Bonds.			
$200,000	American Bell Tel. Co. 4's of 1908,	$200,508.28	
200,000	American Tel. & Tel. Co. 4's of 1929,	196,000.00	
100,000	Boston Electric Light Co. 1st Cons. M. 5's of 1924,	111,891.02	
145,000	Broadway Realty Co. Purchase money 1st M. 5's of 1926,	154,433.02	
140,000	Chicago Edison Co. 1st M. 5's of 1926,	145,517.60	
250,000	Chicago Junction Railways and Union Stock Yards Coll. Trust 5's of 1915,	250,161.15	
100,000	Chicago Junction Railways and Union Stock Yards 4's of 1940,	98,500.00	
100,000	Detroit Edison Co. 1st M. 5's of 1933,	102,339.10	
100,000	General Electric Convertible Deb. 5's of 1917 (subscription 50% paid),	56,032.50	
100,000	Madison River Power Co. 1st M. 5's of 1935,	85,000.00	
100,000	Metrop. Tel. & Tel. Co. 1st M. 5's of 1918,	99,500.00	
100,000	Minneapolis General Electric Co. Gen. M. 5's of 1934,	102,330.52	
100,000	Montreal Light, Heat and Power Co. 1st M. Coll. Tr. 4½'s of 1932,	100,816.63	
	Amounts carried forward,	$1,703,029.82	$10,697,579.06

	Amounts brought forward, . .	$1,703,029.82	$10,697,579.06
Sundry Bonds (*continued*).			
$100,000	Municipal Gas & Electric Co. of Rochester, N. Y., 1st M. 4½'s of 1942, . . .	100,000.00	
100,000	New England Tel. & Tel. Co. 5's of 1916,	108,470.56	
100,000	North American Co. Coll. Trust 5% Notes of 1912, ...	93,625.00	
150,000	Portland Gen'l Elec. 1st M. 5's of 1935,	152,100.00	
100,000	R'y & L't Secur. Coll. Tr. 5's of 1935,	100,954.60	
160,000	St. Louis National Stock Yards Co. 1st M. 4's of 1930, ...	157,650.00	
100,000	Seattle Electric Co. 5% Notes of 1911,	98,666.67	
50,000	United Electric Securities Co. Coll. Trust S. F. 5's of 1935, 22d Series,	51,327.58	
50,000	United Electric Securities Co. Coll. Trust 5's of 1936, 24th Series, . . .	50,000.00	
50,000	Wood Worsted Mills Corp'n 4½% Cons. and Equip. Gold Notes of 1910, . . .	49,500.00	2,665,324.23
Railroad Stocks.			
700 shares	Baltimore & Ohio, ...	$70,362.50	
507 "	Chicago, Milwaukee & St. Paul, preferred (subscription 25% paid), .	12,645.58	
1015 "	Chicago, Milwaukee & St. Paul, . .	152,157.50	
253 "	" " " " (subscription 25% paid), ...	6,293.44	
1625 "	Chicago & No. Western, ...	240,166.25	
955 "	Great Northern, preferred, ...	256,358.56	
382 "	" " " (55% paid),	21,010.00	
955 "	" " Iron Ore Properties,	....	
800 "	Louisville & Nashville, ...	93,925.00	
700 "	Manhattan, ...	92,762.50	
1665 "	New York Central & Hudson River, .	108,873.21	
418 "	New York, New Haven & Hartford, .	74,693.86	
500 "	Northern Pacific, ...	64,537.50	
4771 "	Pennsylvania, ...	309,500.30	1,503,286.20
Manufacturing and Telephone Stocks.			
2000 shares	American Smelters Securities Co. 5% cumulative, preferred, series B, ...	$196,000.00	
700 shares	American Tel. & Tel. Co., ...	98,500.38	
620 "	" " " " (subscrip'n),	32,110.14	
12 "	Amoskeag Manufacturing Co., . . .	3,654.00	
800 "	General Electric Co., ...	42,037.50	
187 "	Merrimack Manufacturing Co., . . .	18,615.10	
24 "	Pacific Mills, ...	16,668.29	407,585.41
Real Estate Trust Stocks.			
1000 shares	Barristers Hall, ...	$92,766.00	
2500 "	Department Store, ...	220,291.88	
	Amounts carried forward, . .	$313,057.88	$15,273,774.90

Amounts brought forward, . . .	$313,057.88	$15,273,774.90
Real Estate Trust Stocks (*continued*).		
1000 shares Essex Street, ...	100,000.00	
750 " Kimball Building, ...	75,000.00	
1089 " Paddock Building, ...	104,363.72	
1000 " Post Office Square Building, ...	103,000.00	695,421.60
Sundry Stocks.		
500 shares Edison Elec. Illum. Co., Boston, Mass.,	$101,062.50	
1500 " Massachusetts Gas Companies, pref'd,	132,107.00	233,169.50
Real Estate in Boston.		
Adams Estate, Washington Street, ...	$271,697.02	
Amory Estate, Franklin Street, ...	165,615.81	
Cowdin Estate, Haymarket Square, ...	36,000.00	
Estate, 20 and 21 Haymarket Square, ...	58,913.52	
Faneuil Hall Square Estate, ...	107,047.80	
Gerrish Block, Blackstone and North Streets, . .	192,875.75	
Gray Estate, Washington Street, ...	973,806.15	
Lowell Estate, Washington Street, ...	464,368.91	
Old Boston Music Hall Estate, ...	356,611.00	
Townsend Estate, Hawkins Street, ...	44,569.49	
Webb Estate, Washington Street, ...	164,604.79	2,836,110.24
Sundries.		
Advances to Antitoxin Laboratory, ...	$404.89	
" **Bussey** Trust, ...	348,227.21	
" **Calvin & Lucy Ellis** Real Estate,	402.02	
" Dental School Real Estate, ...	87.58	
" Medical School, ...	6,373.03	
" Observatory, ...	1,024.63	
" **Peabody** Museum of American Archaeology and Ethnology, . .	2,774.22	
" Botanic Department, ...	7,352.39	
" **Harvard** Dining Association, . .	173,295.30	
" **Randall** Hall Association, ...	29,702.27	
" **Uriah A. Boyden** Fund, . . .	9,030.62	
" Classical Publication Fund of the **Class of 1856,**	1,750.82	
" Woodland Hill Fund, ...	2,875.65	
" Stadium, ...	31,019.13	
" Sundry Accounts, ...	1,895.66	
	$616,215.42	
Term Bills overdue, ...	58,858.99	675,074.41
Cash in City Trust Co., ...	$80,132.02	
" Equitable Trust Co., ...	697.65	
" Merchants National Bank, ...	908.71	
" National Union Bank, ...	1,547.29	
" Old Boston National Bank, ...	65,580.93	
" hands of Bursar, ...	30,232.67	179,099.27
Total, ...		$19,892,649.92

SPECIAL INVESTMENTS IN DETAIL.

Any Fund separately invested, wholly, or in part, except Funds in "University Houses and Lands," is kept so either because the giver restricted its investment, even in some cases having selected the securities, or because the gift establishing the Fund, or adding to it, was received in securities, or in other kinds of property, which have not yet been sold for reinvestment with General Investments.

The Special Investments are summarized on page 52. The Funds separately invested for each Department and the income are as follows: —

UNIVERSITY.	Principal, July 31, 1907.	Income.
John W. Carter,		
University Houses and Lands, ...	$12,500.00	$369.09
George B. Dorr,		
University Houses and Lands, ...	115,966.56	3,424.21
George Draper,		
University Houses and Lands, ...	48,458.50	1,430.86
Robert H. Eddy,		
University Houses and Lands, ...	56,787.00	1,676.78
John Davis Williams French,		
University Houses and Lands, ...	5,322.09	157.15
John C. Gray,		
University Houses and Lands, ...	25,000.00	738.19
Walter Hastings,		
Real Estate, Sacramento St., Cambridge, ...	20,000.00	728.48
Insurance and Guaranty,		
Real Estate, Lucas St., Boston, ...	4,000.00	
Joseph Lee,		
University Houses and Lands, ...	10,000.00	295.27
Henry S. Nourse (part),		
25 shares Brookside Mills (sold during year), . . .		87.50
40 " Missouri Zinc Fields Co., ...	120.00	
Francis E. Parker,		
University Houses and Lands, ...	113,817.44	3,360.75
Henry L. Pierce (Residuary) (part),		
University Houses and Lands, ...	48,435.45	1,095.29
Riverside,		
6 shares Harvard Riverside Associates, ...	6,000.00	
Henry Villard,		
University Houses and Lands, ...	50,000.00	1,476.38
William F. Weld,		
University Houses and Lands, ...	100,000.00	2,952.76
Amounts carried forward, ...	$616,407.04	$17,792.71

Amounts brought forward, ...	$616,407.04	$17,792.71

COLLEGE.

Daniel A. Buckley (part),		
Real Estate in Cambridge, Mass., ...	70,228.31	7,637.45
" " Deer Isle, Me., ...	1.00	
Edward W. Codman (part),		
$5,000 Kansas City, Fort Scott & Memphis R. R. Cons. M. 6's of 1928, ...	6,250.00	300.00
5,000 Northern Pacific–Great Northern Joint 4's (C. B. & Q. collateral) of 1921, ...	4,816.25	200.00
2 shares Pacific Mills, ...	4,600.00	640.00
15 " Barristers Hall Trust, ...	1,085.00	45.00
11 " Boston Real Estate Trust, ...	13,225.00	495.00
25 " Central Building Trust, ...	2,375.00	100.00
Mortgage on real estate in Nahant, Mass. (paid during year), ...		122.78
Edward Erwin Coolidge Fund,		
200 shares U. S. Smelting, Refining & Mining Co.,	9,000.00	700.00
T. Jefferson Coolidge, for Research in Physics,		
625 shares Massachusetts Electric Co., cum. pref'd,	57,500.00	
Eliot Professorship (**Jon. Phillips's** Gift),		
$10,000 City of Boston 3½'s of 1920, ...	10,000.00	350.00
Professorship of Hygiene (part),		
Policy of Mass. Hospital Life Insurance Co., . .	5,000.00	200.00
$16,000 Northern Pacific–Great Northern Joint 4's (C. B. & Q. collateral) of 1921, ...	15,681.85	640.00
Charles Eliot Norton Fellowship,		
$15,000 Northern Pacific–Great Northern Joint 4's (C. B. & Q. collateral) of 1921, ...	14,100.00	600.00
George Foster Peabody Scholarship,		
$6,000 Mexican Coal & Coke Co. 1st M., S. F. 5's of 1926, ...	4,800.00	300.00
William Reed Scholarship,		
1,000 New York Central & H. R. Gold 3½'s of 1997,	1,000.00	17.50
1,000 Norfolk and Western Divisional 1st lien & gen. M. 4's of 1944, ...	1,000.00	20.00
$2,000 Northern Pacific–Great Northern Joint 4's (C. B. & Q. collateral) of 1921, ...	2,000.00	40.00
Nelson Robinson Jr. Additional,		
1,750 shares Gauley Coal Land Co. preferred, . .	175,000.00	
Dunlap Smith Scholarship,		
$5,000 Metropolitan West Side Elevated R. R. Extension M. 4's of 1938, ...	4,700.00	200.00
Amounts carried forward, ...	$1,018,764.45	$30,400.44

Amounts brought forward, ...	$1,018,764.45	$30,400.44
Stoughton Scholarship (part),		
Real Estate in Dorchester, ...	1,294.30	100.00
Sarah E. Potter Fund (part),		
33 shares Pureoxia Co., ...	165.00	
Teachers' Endowment (part),		
Broadway Realty Co. Purchase Money, 2d M. 5's of 1916, ...	5,000.00	250.00
$50,000 Wisconsin Central, Minneapolis Terminal Purchase Money M. 3½'s of 1950, ...	50,000.00	1,750.00
10 shares **Harvard** Riverside Associates, ...	10,000.00	
Wales Professorship of Sanskrit,		
Real Estate, Cornhill, Boston, ...	40,000.00	1,700.02
Samuel Ward's Gift (part),		
Ward's (Bumkin) Island, Boston Harbor, . . .	1.00	

LIBRARY.

Ichabod Tucker (part),		
Policy of Mass. Hospital Life Insurance Co., . . .	5,000.00	200.00
William R. Castle,		
$1,000 Honolulu Gas Co., Limited, 6's of 1925, . .	1,000.00	

LAW SCHOOL.

James Barr Ames Prize (part),		
Personal Note, ...	2,000.00	

MEDICAL SCHOOL.

Calvin and Lucy Ellis (part),		
40,000 Northern Pacific–Great Northern Joint 4's (C. B. & Q. collateral) of 1921, ...	26,585.00	1,600.00
Real Estate in Boston (half), ...	22,500.00	88.00
Real Estate in Eden, Bar Harbor, Maine, ...	10,000.00	
George C. Shattuck (part),		
$25,000 Kansas City, Fort Scott & Memphis R. R. Cons. M. 6's of 1928 ($203.70 deducted from income for sinking premium), ...	29,277.80	1,296.30

OBSERVATORY.

Advancement of Astronomical Science (1902) (part),		
$5,000 Northern Pacific–Great Northern Joint 4's (C. B. & Q. collateral) of 1921, ...	4,800.00	200.00
15 shares Calumet & Hecla Mining Co., ...	9,000.00	1,200.00
Amounts carried forward, ...	$1,235,387.55	$38,784.76

Amounts brought forward, ...	$1,235,387.55	$38,784.76

PEABODY MUSEUM OF AMERICAN ARCHAEOLOGY AND ETHNOLOGY.

Peabody Building (part),	$54,000 Kansas & Missouri R. R. 1st M. 5's of 1922,	11,512.72	622.32
Peabody Collection (part),		19,218.64	1,038.84
Peabody Professor (part),		19,218.64	1,038.84
Thaw (part) ($8.47 deducted from income for sinking premium),			
$20,000 Girard Point Storage Co. 1st M. 3½'s of 1940,		20,279.67	691.53

ARNOLD ARBORETUM.

Robert Charles Billings,		
$5,000 Butte Water Co. 1st M. 5's of 1921, ...	4,000.00	250.00

BUSSEY INSTITUTION.

Woodland Hill,		
Laboratory of Comparative Pathology building, .	17,783.21	1,000.00

SPECIAL FUNDS.

Bussey Trust (part),		
Real Estate in Boston, ...	386,548.71	14,754.94
Fund of the **Class of 1834**,		
Policy of Mass. Hospital Life Insurance Co., . . .	1,000.00	40.00
Fund of the **Class of 1844**,		
Policy of Mass. Hospital Life Insurance Co., . . .	6,500.00	260.00
Fund of the **Class of 1853**,		
Policy of Mass. Hospital Life Insurance Co., . . .	3,725.00	149.00
Calvin and **Lucy Ellis** Aid (part),		
Real Estate in Boston (half), ...	22,500.00	87.99
Charles L. Hancock Bequest (part),		
Real Estate in Chelsea, ...	1.00	
Robert Troup Paine (accumulating) ($187.38 deducted from income for sinking premiums),		
$38,000 Massachusetts 3½'s of 1913, ...	38,940.88	1,185.25
5,000 " " 1916, ...	5,187.70	154.15
6,000 " " 1935, ...	6,305.91	199.08
4,000 " " 1938, ...	4,331.19	129.14
George Smith Bequest (part),		
$10,000 Du Quoin, Ill., Water Works Co. 6's of 1901, ...	1.00	
20,000 Laclede Gas Light Co. 5's of 1919, . . .	20,000.00	1,000.00
32,000 United States Steel Corporation 5's of 1963,	24,000.00	1,600.00
200 shares Laclede Gas Light Co., preferred, . .	18,800.00	1,000.00
Amounts carried forward, ...	$1,865,241.82	$63,985.84

Amounts brought forward, ...	$1,865,241.82	$63,985.84
Price Greenleaf. ($384.52 deducted from income for sinking premiums.) The total amount of this Fund is $792,478.15, which is invested as follows: —		
$70,000 American Bell Telephone Co. 4's of 1908,	70,128.95	2,671.05
70,000 Broadway Realty Co. Purchase money 1st M. 5's of 1926, ...	73,592.04	3,315.80
16,000 Burl. & Mo. R. R. R. in Neb. non ex. 6's of 1918, ...	16,000.00	1,110.00
25,000 Central Crosstown Coll. Trust 5 % Notes of 1909, ...	24,843.75	1,250
43,500 Central Vermont R'y 1st M. 4's of 1920, .	37,845.00	1,740.00
3,000 Chicago, Burl. & Quincy R. R. 4's of 1922,	2,880.00	120.00
50,000 Chicago Junction Railways & Union Stock Yards Coll. Trust 5's of 1915, ...	47,000.00	2,500.00
8,000 Kansas City, Fort Scott & Memphis cons. M. 6's of 1928, ...	9,498.84	408.63
50,000 Metropolitan Tel. & Tel. Co. 1st M. 5's of 1918, ...	49,750.00	2,500.00
34,000 New York Central & Hudson River R. R. (Michigan Central Collateral) 3½'s of 1998,	28,412.10	1,190.00
32,000 Northern Pacific–Great Northern Joint 4's (C. B. & Q. collateral) of 1921, ...	19,993.55	1,280.00
50,000 Seattle Electric Co. 5 % Notes of 1911, . .	49,333.33	2,409.72
50,000 Union Pacific R.R. 1st M. & L.G. 4's of 1947,	44,625.00	2,000.00
50,000 Note of Massachusetts Cotton Mills, . . .	50,000.00	2,437.50
360 shares Boston & Lowell R. R., ...	46,800.00	2,880.00
237 “ Fitchburg R. R., preferred, ...	22,306.27	1,185.00
40 “ Great Northern, preferred, ...	11,525.00	280.00
16 “ “ “ “ (55 % paid),	880.00	
40 “ “ “ Iron Ore Properties,	. . . .	
355 “ Old Colony R. R., ...	63,190.00	2,485.00
27 “ N. Y. Central & Hudson River R. R., .	2,866.28	144.25
290 “ Northern R. R. (N. H.), ...	29,290.00	1,740.00
52 “ West End Street Railway, preferred, .	4,305.56	208.00
34 “ Central Vermont R'y, ...	428.72	
707 “ Pennsylvania R. R., ...	51,856.04	2,474.50
17 “ Boston Real Estate Trust, ...	22,978.75	765.00
100 “ Paddock Building Trust, ...	10,000.00	350.00
Cash in American Trust Co., ...	2,228.97	46.15
“ City Trust Co. (withdrawn during year),		40.71
“ Old Boston National Bank, ...	2,000.00	
Totals of special investments, . . .	$2,659,799.97	$101,517.15

FUNDS AND BALANCES.

The foregoing property represents the following Funds and balances, and is answerable for the same.

[The date following the title of a Fund shows the year of its establishment.]

Principal, Aug. 1, 1906.	UNIVERSITY FUNDS.	Principal, July 31, 1907.	
$1,143.00	Band Music (1903),	$1,143.00	
2,000.00	**William H. Baldwin, Jr.** (1906),	2,000.00	
4,950.00	**Andrew Bigelow** (1898),	4,950.00	
5,000.00	**Stanton Blake** (1899),	5,000.00	
4,771.33	**Charlotte F. Blanchard** (1891),	4,771.33	
5,250.00	**Samuel D. Bradford** (1866),	5,250.00	
	Martin Brimmer Fund (1907),	50,000.00	
100,000.00	**James C. Carter** (1906),	100,000.00	
12,500.00	**John W. Carter** (1898),	12,500.00	
	Edward Erwin Coolidge (1906),	9,200.00	
154.82	**Thomas Cotton** (1727),	155.08	
33,835.06	**John Cowdin** (1888),	33,835.06	
115,966.56	**George B. Dorr** (1882),	115,966.56	
48,458.50	**George Draper** (1892),	48,458.50	
56,787.00	**R. H. Eddy** (1901),	56,788.00	
101,225.49	**Harvard Ellis** (1895),	101,225.49	
25,000.00	**Richard W. Foster** (1905),	25,000.00	
5,322.09	**John Davis Williams French** (1901),	5,322.09	
20,571.18	**Gore** (1834),	20,571.18	
25,000.00	**John C. Gray** (1881),	25,000.00	
20,000.00	**Walter Hastings** (1888),	20,000.00	
20,000.00	**Henry L. Higginson** (1906),	20,000.00	
5,000.00	**George Baxter Hyde** (1895),	5,000.00	
4,000.00	Insurance and Guaranty (1860),	4,000.00	
16,871.63	**Leonard Jarvis** (1859),	16,871.63	
10,000.00	**Henry P. Kidder** (1894),	10,000.00	
10,000.00	**Joseph Lee** (1802),	10,000.00	
10,000.00	**Theodore Lyman** (1898),	10,000.00	
81,950.54	**Henry T. Morgan** (1883),	81,950.54	
15,750.00	**Israel Munson** (1844),	15,750.00	
48,972.49	**Henry S. Nourse** (1904),	50,557.37	
113,817.44	**Francis E. Parker** (1886),	113,817.44	
30,000.00	**William Perkins** (1888),	30,000.00	
50,217.37	**Henry L. Pierce** (1898),	51,084.23	
178,183.71	**Henry L. Pierce** (Residuary) (1898),	161,470.07	
63,640.31	President's (1883),	63,743.28	
366,416.47	Retiring Allowance (1879),	366,416.47	
6,000.00	Riverside (1903),	6,000.00	
23,370.03	**John L. Russell** (1889),	23,370.03	
1,962.53	**Mary R. Searle** (1903),	1,971.95	
46,913.13	**Isaac Sweetser** (1894),	46,913.13	
5,000.00	**Seth Turner** (1883),	5,000.00	
100,000.00	**William F. Weld** (1893),	100,000.00	$1,841,052.43
$1,796,000.68	. . Amounts carried forward,		$1,841,052.43

Principal, Aug. 1, 1906.		Principal, July 31, 1907.	
$1,796,000.68	. . Amounts brought forward, ...		$1,841,052.48
	COLLEGE FUNDS.*		
10,780.42	**John W. P. Abbot** (1874), . . .	11,309.72	
27,748.64	**Alford** Professorship (1765), . . .	27,748.64	
7,806.86	**Daniel Austin** (1879), ...	7,806.86	
5,787.61	**William H. Baldwin, Jr. 1885** (1906), ...	5,787.61	
15,000.00	**Robert Charles Billings,** for **Gray** Herbarium (1903), ...	15,000.00	
1,050.00	**John A. Blanchard** (1873), . .	1,050.00	
39,780.00	Botanic Department (1880), ...	39,780.00	
28,337.40	**Boylston** Professorship (1772), . .	28,337.40	
	Centennial Fund for the Botanic Garden (1907), ...	850.00	
11,610.52	**Francis James Child** Mem. (1897),	11,637.55	
7,105.12	Classical Publication Fund of the **Class of 1856** (1888), ...	7,105.12	
103,669.41	**Class of 1880** (1905), ...	103,669.41	
	Fund of the **Class of 1882** (1907),	53,863.36	
150,617.54	Class Subscription (1870), ...	150,637.54	
322,158.89	**Edward W. Codman** (1905), . .	322,158.89	
57,969.66	**T. Jefferson Coolidge,** for Research in Physics, ...	57,703.85	
1,900.49	Cryptogamic Herbarium (balance), .	2,388.79	
3,768.73	**Paul Dudley** (1751), ...	3,853.79	
106,516.38	**Eaton** Professorship (1903), . . .	106,746.32	
21,619.50	**Eliot** Professorship (1814), ...	21,619.50	
10,000.00	**Eliot** " **(Jon. Phillips'** gift) (1854), ...	10,000.00	
3,500.01	**Erving** Professorship (1791), . . .	3,500.01	
35,990.99	**Fisher** " (1834), . . .	35,990.99	
419.24	**Henry Flynt** (1760), ...	434.24	
16,240.38	Fund for Permanent Tutors (1796),	16,240.38	
1,033.57	Fund for Religious Services (1887), .	1,033.57	
	German Professorship (1907), . . .	350.00	
13,556.84	**Godkin** Lectures (1903), ...	14,222.49	
6,950.72	Gospel Church (1868), ...	7,121.37	
1,734.70	**Gray** Herbarium (balance), ...	278.47	
32,611.00	**Asa Gray** Memorial (1898), . . .	32,611.00	
21,608.04	**Asa Gray** Professorship of Systematic Botany (1897), ...	21,644.50	
196,677.45	**Gurney** (1888), ...	196,934.29	
5,538.35	**George Silsbee** and **Ellen Sever Hale** (1904), ...	5,610.27	
15,101.99	**Harvard** Oriental Series (1899), . .	15,218.85	
20,655.91	Herbarium (1865), ...	20,655.91	
$3,100,847.04	. . Amounts carried forward, . . .	$1,360,900.69	$1,841,052.48

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* Including some actually used in the Graduate Schools.

Principal, Aug. 1, 1906.		Principal, July 31, 1907.	
$3,100,847.04	. . Amounts brought forward, . . .	$1,360,900.69	$1,841,052.43
20,217.08	**Hersey** Professorship (1772), . . .	20,217.08	
21,744.18	**Hersey** Professorship (**Thomas Lee's** gift) (1856), ...	21,744.18	
34,517.60	**Hollis** Professorship of Divinity (1721),	34,517.60	
3,747.33	**Hollis** " of Mathematics (1726),	3,747.33	
5,981.12	**Ingersoll** Lecture (1894), ...	6,007.29	
1,934.53	**Jefferson** Physical Lab'y (balance),	1,866.76	
10,881.95	Lectures on Political Economy (1889),	10,806.26	
15,796.97	**Lee** Fund for Reading (1863), . . .	15,796.97	
110,083.71	**Henry Lee** Professorship (1900), .	109,988.84	
8,022.97	**Joseph Lovering** for Physical Research (1891), ...	8,349.32	
66,407.31	**Lowell** Fund for a Botanic Garden (1882) (formerly Professorship of Natural History, 1805), ...	66,407.31	
25,000.00	**Arthur T. Lyman** (1904), . . .	25,000.00	
43,062.93	**McLean** Professorship (1834), . .	43,062.93	
1,086.62	Music Department (1903), ...	1,139.99	
24,534.86	**William Belden Noble** Lectures (1898), ...	25,739.53	
104,398.89	**Francis Greenwood Peabody** Endowment (1905), ...	105,729.75	
14,334.00	**Daniel H. Peirce** (1876), ...	14,404.38	
21,000.00	**Perkins** Professorship (1841), . .	21,000.00	
31,500.00	**Jonathan Phillips** (1861), . . .	31,500.00	
75,000.00	Physical Laboratory Endowm't (1881),	75,000.00	
25,020.19	**Plummer** Foundation (1854), . .	25,020.19	
52,500.00	**Pope** Professorship (1868), ...	52,500.00	
	Sarah E. Potter Endowment Fund,	50,165.00	
238,202.91	Professorship of Hygiene (1899), . .	246,392.60	
525,000.00	**Nelson Robinson, Jr.** (1899), .	530,000.00	
175,000.00	**Nelson Robinson, Jr.** Additional (1906), ...	199,262.34	
56,368.73	**Rumford** Professorship (1819), . .	56,368.73	
2,000.00	**John L. Russell** (1889), ...	2,000.00	
60,000.00	**Gurdon Saltonstall** (1901), . .	60,000.00	
4,815.21	**George William Sawin** (1890),	4,805.09	
5,118.50	**Robert W. Sayles** (1906), . . .	5,364.40	
1,962.16	School for Social Workers (balance), (1904), ...	424.34	
23,139.83	**Smith** Professorship (1816), . . .	23,139.83	
2,500.00	**William M. Spackman** (1905),	2,500.00	
12,560.17	**Josiah Stickney** (1899), ...	11,791.87	
1,846,394.10	Teachers' Endowment (1905), . . .	1,933,120.48	
16,655.01	**John E. Thayer** (1885), ...	16,317.44	
1,047.79	**Elizabeth Torrey** (1896), . . .	1,084.55	
11,584.47	**Henry Warren Torrey** (1890), .	11,313.80	
$6,799,968.16	. . Amounts carried forward, . . .	$5,234,496.87	$1,841,052.43

Principal, Aug. 1, 1906.		Principal, July 31, 1907.	
$6,799,968.16	. . Amounts brought forward, . . .	$5,234,496.87	$1,841,052.43
89,368.98	Twenty-fifth Anniversary Fund of the **Class of 1881** (1906), ...	99,965.41	
101,972.21	**Unknown** Memorial (1898), . . .	101,645.42	
50,000.00	**Henry Villard** (1902), ...	50,000.00	
40,000.00	**Wales** Professorship (1903), . . .	40,000.00	
17,003.02	**Samuel Ward** (1680), ...	17,837.82	
6,492.03	**Cyrus M. Warren** (1893), . . .	6,526.83	
115,167.01	**Henry C. Warren** (1899), . . .	116,821.71	
6,440.89	**Sylvester Waterhouse** (1896), .	6,757.14	
50,000.00	**Increase Sumner Wheeler** (1889),	50,000.00	
32.50	**Jerome Wheelock** (1903), . . .	44.42	
1,127.10	**Chauncey Wright** (1884), . . .	1,182.44	
	GIFTS FOR SPECIAL USE (BALANCES).		
3,319.93	For Equipment for the Department of Architecture, ...	1,385.33	
1,890.19	Bermuda Biological Station, . . .	914.96	
1,183.82	Cases, etc., at the Botanic Garden,	702.57	
257.07	Classical Library, ...	136.89	
322.52	Collections for a Germanic Museum,	322.52	
.13	Electrical Apparatus, ...	.13	
1,512.34	The study of Social Ethics, ...		
931.48	Furnishings of the Department of Social Ethics, ...	814.51	
715.86	Furnishing Emerson Hall, ...	173.07	
756.45	Philosophical Library, ...	784.35	
10.65	Physical Research, ...	1,404.72	
3,445.11	Plantation of Shrubs, etc., ...	3,514.01	
1,125.00	Salaries, ...	1,125.00	
521.88	Sanskrit Department, ...	1,115.01	
261.35	Semitic Library, ...	1,018.01	
1,477.38	Sugar-cane investigation, etc., . .	970.95	
3,460.57	Sundry Gifts (balances), ...	3,927.43	
	FELLOWSHIP FUNDS.		
20,157.98	**Julia Amory Appleton** (1906),	19,647.74	
5,348.73	**George W. Dillaway** (1903), . .	5,461.37	
11,395.46	**Ozias Goodwin** Memorial (1889),	11,729.96	
10,923.96	**Harris** (1868), ...	10,960.33	
26,114.41	**Edward William Hooper** (1905),	25,646.61	
11,450.94	**John Thornton Kirkland** (1871),	11,113.18	
11,963.64	**Henry Lee** Memorial (1889), . .	12,101.07	
14,114.22	**Charles Eliot Norton** (1901), .	14,114.91	
13,104.76	**Robert Treat Paine** (1887), . .	13,248.22	
59,068.27	**John Parker** (1873), ...	59,718.51	
10,296.25	**Francis Parkman** (1906), . . .	10,351.78	
32,705.83	**Rogers** (1869), ...	33,224.19	
$7,525,408.08	. . Amounts carried forward, . . .	$5,970,905.39	$1,841,052.43

Principal, Aug. 1, 1906.		Principal, July 31, 1907.	
$7,525,408.08	. . Amounts brought forward, . . .	$5,970,905.39	$1,841,052.43
12,242.70	**Henry Bromfield Rogers** Memorial (1889),	12,393.83	
50.00	South End House (balance),	50.00	
11,970.27	**John Tyndall** (1885),	12,058.00	
11,566.14	**James Walker** (1881),	11,634.03	
23,849.85	**Whiting** (1896),	24,420.88	
	SCHOLARSHIP FUNDS.		
3,847.84	**Abbot** (1852),	3,886.78	
2,277.70	**Alford** (1785),	2,389.55	
5,406.14	**Bartlett** (1881),	5,421.57	
5,681.66	**Bassett** (1876),	5,690.65	
13,483.96	**Bigelow** (1865),	13,546.04	
2,844.90	**Samuel A. Borden** (1896),	2,984.59	
114,843.68	**Bowditch** (1864),	115,482.52	
3,773.92	**Bright** (balance),	4,061.72	
3,919.87	**Browne** (1687),	3,962.34	
5,443.20	**Morey Willard Buckminster** (1898),	5,510.45	
34,291.39	**Burr** (1895),	34,775.08	
6,180.47	**Ruluff Sterling Choate** (1884),	6,208.91	
8,502.56	**Class of 1802** (1870),	8,595.06	
3,275.78	" **1814** (1853),	3,311.63	
6,729.12	" **1815** (**Kirkland**) (1852),	6,809.51	
4,684.24	" **1817** (1852),	4,739.22	
3,546.42	" **1828** (1882),	3,570.53	
5,114.66	" **1835** (1853),	5,180.81	
5,251.44	" **1841** (1871),	5,309.26	
5,250.21	" **1852** (**Dana**) (1876),	5,307.98	
16,119.27	" **1856** (1885),	16,310.71	
4,876.13	" **1867** (1886),	4,940.54	
5,206.54	" **1877** (1902),	5,262.20	
6,132.52	" **1883** (1900),	6,208.65	
12,273.76	**Crowninshield** (1877),	12,426.41	
600.00	**Warren H. Cudworth** (balance),	600.00	
6,109.55	**Francis H. Cummings** (1898),	6,184.55	
5,595.79	**George** and **Martha Derby** (1881),	5,620.55	
5,232.96	**Julius Dexter** (1892),	5,269.90	
2,892.68	**Orlando W. Doe** (1893),	2,934.73	
5,530.79	**William Samuel Eliot** (1875),	5,552.36	
	Department of Education (balance),	250.00	
41,824.41	**Joseph Eveleth** (1896),	42,277.97	
2,220.40	Fall River (1893),	2,249.40	
6,421.09	**Farrar** (1873),	6,486.36	
11,690.66	**Richard Augustine Gambrill** (1890),	11,814.69	
7,827.63	**Charles Haven Goodwin** (1889),	7,911.99	
$7,969,990.38	. . Amounts carried forward, . . .	$6,420,507.34	$1,841,052.43

Principal, Aug. 1, 1906.		Principal, July 31, 1907.	
$7,969,990.38	. . Amounts brought forward, . . .	$6,420,507.34	$1,841,052.48
4,409.98	**Greene** (1863), ...	4,476.51	
100.00	**Price Greenleaf** (balance), . . .	100.00	
10,444.99	**John Appleton Haven** (1902), .	10,477.84	
24,388.04	**William Hilton** (1897), ...	24,685.49	
11,023.73	**Ebenezer Rockwood Hoar** (1895), ...	11,140.01	
6,461.20	**Levina Hoar,** for the town of Lincoln, Mass. (1876), ...	6,528.44	
13,725.46	**Hodges** (1878), ...	13,772.12	
6,432.71	**Hollis** (1722), ...	6,498.57	
11,026.18	**Henry B. Humphrey** (1890), . .	11,117.56	
31,362.34	**Charles L. Jones** (1901), ...	31,702.21	
10,666.71	**George Emerson Lowell** (1886),	10,770.46	
5,419.49	**Markoe** (1903), ...	5,535.56	
3,922.40	**Matthews** (balance), ...	4,280.71	
6,323.43	**Merrick** (1888), ...	6,408.89	
8,465.10	**Morey** (1868), ...	8,555.73	
5,939.85	**Lady Mowlson** (1643), ...	6,006.51	
	Boston Newsboys' (1906), ...	2,670.81	
5,808.65	**Howard Gardner Nichols** (1897),	5,868.87	
6,195.38	**Lucy Osgood** (1873), ...	6,184.56	
5,130.00	**George Foster Peabody** (1902),	5,296.20	
6,854.32	**Pennoyer** (1670), ...	7,035.85	
4,483.00	**Rebecca A. Perkins** (1869), . .	4,553.12	
11,014.50	Philadelphia (1904), ...	11,180.29	
1,632.96	**Wendell Phillips** Mem'l (1895),	1,663.14	
	William Reed (1907), ...	4,077.50	
350.00	**Ricardo** Prize (balance), ...	350.00	
1,279.50	**Rodger** (1883), ...	1,342.30	
3,539.52	**Henry Bromfield Rogers** (1859),	3,593.33	
5,864.03	**Edward Russell** (1877), ...	5,926.95	
5,750.92	**Sales** (1893), ...	5,833.29	
11,451.29	**Saltonstall** (1739), ...	11,588.53	
8,734.69	**Leverett Saltonstall** (1895), . .	8,838.58	
7,094.68	**Mary Saltonstall** (1730), ...	7,143.04	
3,265.12	**Sever** (1868), ...	3,275.48	
11,388.06	**Sewall** (1696), ...	11,467.21	
49,847.67	**Shattuck** (1854), ...	50,255.21	
6,200.20	**Slade** (1877), ...	6,214.62	
4,723.44	**Dunlap Smith** (1903), ...	4,704.57	
4,599.92	**Story** (1864), ...	4,650.78	
3,218.54	**Stoughton** (1701), ...	3,313.01	
3,884.58	**Swift** (1899), ...	4,075.33	
80,578.53	**Thayer** (1857), ...	81,294.96	
4,369.88	**Gorham Thomas** (1865), ...	4,434.45	
7,852.95	**Toppan** (1868), ...	7,938.53	
26,100.25	**Townsend** (1861), ...	26,381.76	
$8,421,314.57	. . Amounts carried forward, . . .	$6,883,666.17	$1,841,052.48

Principal, Aug. 1, 1906.		Principal, July 31, 1907.	
$8,421,314.57	. . Amounts brought forward, . . .	$6,883,666.17	$1,841,052.43
5,130.60	**Walcott** (1855), ...	5,182.53	
10,847.16	**Christopher M. Weld** (1899), .	10,979.75	
5,399.55	**Jacob Wendell** (1899), ...	5,469.60	
11,938.89	**Whiting** (1874), ...	12,105.10	
5,085.18	**Josiah Dwight Whitney** (1904),	5,094.85	
9,757.14	**Mary L. Whitney** (1903), . . .	10,033.71	
	Willard (1907), ...	10,061.38	
10,202.83	**Charles Wyman** (1905), ...	10,303.80	
100.00	Anonymous Gift for Scholarship use,	100.00	
	BENEFICIARY AND LOAN FUNDS.		
52,176.32	**Rebecca C. Ames** (1903), . . .	53,070.16	
632.50	**Nathaniel Appleton** (1772), . .	663.53	
1,993.46	**Frank Bolles** Memorial (1894), .	2,066.32	
1,578.42	**William Brattle** (1717), ...	1,655.90	
62,801.70	**Daniel A. Buckley** (1905), . . .	70,559.26	
50,921.47	**Walter Channing Cabot** (1905),	51,007.68	
1,078.31	**Thomas Danforth** (1724), . . .	1,131.24	
5,448.73	**Moses Day** (1880), ...	5,455.27	
451.73	**John Ellery** (1738), ...	473.92	
1,333.34	Exhibitions (1796), ...	1,334.94	
821.09	**Thomas Fitch** (1737), ...	861.40	
486.98	**Ephraim Flynt** (1723), ...	510 89	
169.32	**Henry Flynt** (1760), ...	177.62	
506.28	**Henry Gibbs** (1722), ...	531.12	
3,353.67	**John Glover** (1653), ...	3,518.35	
18,943.80	**Price Greenleaf** Aid (balance), .	17,068.79	
1,701.58	**Edwin A. W. Harlow** (1905), .	11,177.93	
377.52	**Edward Holyoke** (1743), . . .	396.08	
2,441.40	**Robert Keayne** (1659), ...	2,561.25	
26,185.00	**Bertram Kimball** (1903), . . .	26,227.50	
1,056.92	**Mary Lindall** (1812), ...	1,108.82	
5,988.87	**Susan B. Lyman** (1899), ...	5,988.87	
345.02	**Susan B. Lyman** Loans (College) (balance), ...	541.06	
237.17	**Anne Mills** (1725), ...	248.81	
10,906.81	**Munroe** (1880), ...	10,919.89	
2,076.46	**Palfrey** Exhibition (1821), ...	2,098.39	
4,979.51	**Dr. Andrew P. Peabody** Memorial (1896), ...	5,095.03	
1,192.24	Scholarship and Beneficiary Money Returned (balance), ...	1,288.69	
225.89	**Joseph Sewall** (1765), ...	236.99	
15,231.19	**Alexander Wheelock Thayer** (1899), ...	15,499.03	
11,155.10	**Quincy Tufts** (1877), ...	11,168.49	
304.98	**Benjamin Wadsworth** (1737), .	319.96	
$8,761,878.70	. . Amounts carried forward, . . .	$7,257,960.07	$1,841,052.43

Principal, Aug. 1, 1906.		Principal, July 31, 1907.	
$8,761,878.70	. . Amounts brought forward, . . .	$7,257,960.07	$1,841,052.48
	PRIZE FUNDS.		
250.00	Anonymous Gift for a prize essay in the Department of History and Government (balance), ...		
1,675.16	**James Gordon Bennett** (1893), .	1,757.40	
421.52	**Philo Sherman Bennett** (1905),	402.24	
10,720.04	**Francis Boott** (1904), ...	11,038.72	
31,414.67	**Bowdoin** Prizes for Dissertations (1791),	31,882.15	
3,232.88	**Boylston** Prizes for Elocution (1817),	3,136.62	
5,401.86	**Coolidge** Debating (1899), ...	5,467.10	
50.00	**Dante** (balance), ...	....	
2,700.00	**Lloyd McKim Garrison** Prize and Medal (1904), ...	2,714.80	
1,963.36	**Edward Hopkins** Gift for "Deturs" (1718) (balance), ...	1,977.21	
1,093.57	**Sales** (1892), ...	1,147.29	
2,620.80	**John O. Sargent** (1889), ...	2,649.49	
7,000.00	**George B. Sohier** (1890), ...	7,000.00	
3,792.02	**Charles Sumner** (1874), ...	3,978.21	
3,944.03	**Robert N. Toppan** (1894), . . .	3,987.68	
2,231.84	**Philip Washburn** (1899), . . .	2,266.43	
114,439.97	**David A. Wells** (1901), ...	114,550.10	7,451,915.51
	LIBRARY FUNDS.		
2,151.54	**Bowditch** (1861), ...	$2,181.25	
223.39	**Bright** (balance), ...	102.95	
	William R. Castle (1907), . . .	1,000.00	
704.83	Fund of the **Class of 1851** (1899),	739.45	
694.08	" " " **1851** (**C. F. Dunbar's** Gift) (1899), ...	728.16	
3,500.00	Book Fund of the **Class of 1881** (1906), ...	3,582.24	
27,700,00	**Edwin Conant** (1892), ...	27,763.33	
25,902.61	**Constantius** (1886), ...	25,916.69	
5,369.64	**Denny** (1875), ...	5,380.42	
5,395.93	**Farrar** (1871), ...	5,418.42	
3,246.38	**Haven** (1844), ...	3,285.11	
10,157.70	**Hayes** (1885), ...	10,078.03	
5,296.86	**Hayward** (1864), ...	5,397.19	
	R. M. Hodges (balance), ...	129.68	
2,434.02	**Hollis** (1781), ...	2,459.72	
2,127.90	**Homer** (1871), ...	2,161.41	
526.70	**Jarvis** (1885), ...	514.75	
5,430.88	**Lane** (1863), ...	5,335.06	
27,272.93	**Lowell** (1881), ...	27,690.52	
60,296.68	**Minot** (1870), ...	60,574.27	
$9,143,262.49	. . Amounts carried forward, . . .	$190,438.65	$9,292,967.94

Principal, Aug. 1, 1906.		Principal, July 31, 1907.	
$9,143,262.49	. . Amounts brought forward, . . .	$190,438.65	$9,292,967.94
8,687.53	**Charles Eliot Norton** (1905), .	8,954.62	
7,238.61	**Lucy Osgood** (1873), ...	7,219.94	
7,026.98	**Mary Osgood** (1860), ...	7,119.63	
139.75	**Price Greenleaf** Income for Books (balance), ...	....	
3,918.60	**Sales** (1892), ...	3,916.67	
5,280.91	**Salisbury** (1858), ...	5,152.20	
	Stephen Salisbury (1907), . . .	5,120.00	
20,000.00	**Sever** (1878), ...	20,000.00	
4,011.78	**Shapleigh** (1801), ...	3,998.32	
160.69	**George B. Sohier** Income for Books (balance), ...	80.17	
10,610.11	Subscription for Library (1859), . .	10,545.71	
37,532.94	**Sumner** (1875), ...	37,514.04	
5,063.22	**Kenneth Matheson Taylor** (1899),	5,168.00	
12,242.04	**Daniel Treadwell** (1885), . . .	12,123.10	
5,018.28	**Ichabod Tucker** (1875), ...	5,007.22	
645.58	**Wales** Income for Books (balance),	801.81	
15,966.02	**Walker** (1875), ...	15,993.00	
5,260.87	**Ward** (1858), ...	5,306.02	
20,513.58	**J. Huntington Wolcott** (1891),	20,226.65	
100,000.00	**Eben Wright** (1883), ...	100,000.00	
3,711.02	Sundry Gifts for books (balances), .	3,219.79	
	Sundry Gifts for service (balances), .	813.45	
1,005.92	Sundry balances, ...	1,060.44	469,779.43
	DIVINITY SCHOOL FUNDS.		
6,364.00	Divinity School (balance), ...	$6,261.20	
71,427.02	New Endowment (1879), ...	71,427.02	
17,000.00	**Oliver Ames** (1880), ...	17,000.00	
525.00	**Hannah C. Andrews** (1836), . .	525.00	
1,115.26	**Daniel Austin** (1880), ...	1,115.26	
1,000.00	**Adams Ayer** (1869), ...	1,000.00	
15,275.00	**Joseph Baker** (1876), ...	15,275.00	
200.40	Beneficiary money returned (balance),	210.22	
4,573.54	**Rushton Dashwood Burr** (1894),	4,540.15	
37,583.74	**Bussey** Professorship (1862), . .	37,583.74	
2,177.95	**Joshua Clapp** (1836), ...	2,177.95	
5,000.00	**Edwin Conant** (1892), ...	5,000.00	
25,544.37	**Dexter** Lectureship (1810), . . .	25,544.37	
54,203.14	**Frothingham** Professorship (1892),	54,703.14	
1,050.00	**Abraham W. Fuller** (1847), . .	1,050.00	
911.34	**Lewis Gould** (1852), ...	911.34	
857.86	**Louisa J. Hall** (1893), ...	899.99	
6,008.43	**Hancock** Professorship (1765), .	6,008.43	
77,600.81	**Charles L. Hancock** (1891), . .	77,600.81	
5,000.00	**Haven** (1898), ...	5,000.00	
$9,750,714.78	. . Amounts carried forward, . . .	$333,833.62	$9,762,747.37

Principal, Aug. 1, 1906.		Principal, July 31, 1907.	
$9,750,714.78	. . Amounts brought forward, . . .	$333,833.62	$9,762,747.37
1,050.00	**Samuel Hoar** (1857), ...	1,050.00	
10,000.00	**Henry P. Kidder** (1881), . . .	10,000.00	
9,184.69	**Henry Lienow** (1841), ...	9,184.69	
1,050.00	**Caroline Merriam** (1867), . . .	1,050.00	
16,015.81	**Parkman** Professorship (1814), .	16,015.81	
582.11	**John W. Quinby** (1888), ...	610.69	
1,000.00	**Abby Crocker Richmond** (1881),	1,000.00	
1,000.00	**John L. Russell** (1890), ...	1,000.00	
10,000.00	**William B. Spooner** (1890), . .	10,000.00	
40,000.00	**Thomas Tileston** of New York Endowment (1879), ...	40,000.00	
5,250.00	**Mary P. Townsend** (1861), . .	5,250.00	
2,100.00	**Winthrop Ward** (1862), ...	2,100.00	
56,345.73	**Winn** Professorship (1877), . . .	56,845.73	
	SCHOLARSHIP AND BENEFICIARY FUNDS.		
2,553.47	**Robert Charles Billings** Prize (1904), ...	2,578.82	
13,360.64	**Abner W. Buttrick** (1880), . . .	13,441.67	
5,727.52	**Thomas Cary** (1820), ...	5,768.76	
2,827.15	**George Chapman** (1834), . . .	2,865.96	
4,564.86	**Joshua Clapp** (1839), ...	4,609.00	
15,149.89	**Jackson** Foundation (1835), . . .	15,253.76	
5,588.52	**J. Henry Kendall** (1863), . . .	5,662.94	
3,534.03	**Nancy Kendall** (1846), ...	3,567.55	
1,050.00	**William Pomroy** (1835), ...	1,050.00	542,739.00
	LAW SCHOOL FUNDS.		
347,742.95	Law School (balance), ...	$132,456.87	
547.32	**James Barr Ames** Loan (1904),	574.18	
4,116.57	**James Barr Ames** Prize (1898),	3,810.51	
78,201.86	**Bemis** Professorship (1879), . . .	82,041.58	
2,021.81	Gift of **James Munson Barnard** and **Augusta Barnard** (balance),	2,047.68	
23,979.82	**Bussey** Professorship (1862), . .	23,979.82	
102,764.98	**James C. Carter** Professorship (1906), ...	107,810.74	
12,047.40	**James Coolidge Carter** Loan (1906), ...	12,638.91	
15,750.00	**Dane** Professorship (1829), ...	15,750.00	
	Samuel Phillips Prescott Fay, 1798, Fund and Scholarship (1907),	5,081.85	
3,564.84	**George Fisher** Scholarship (1906),	3,739.88	
756.12	**Hughes** Loan (1903), ...	476.84	
47,021.25	Law School Book (1882), ...	47,021.25	
100,000.00	Law School Library (1898), ...	100,000.00	
8,340.81	**Royall** Professorship (1781), . . .	8,340.81	
496.20	Scholarship money returned (balance),	739.55	
94,994.97	**Weld** Professorship (1882), . . .	94,994.97	641,505.44
$10,800,996.10	. . Amounts carried forward, ...		$10,946,991.81

Principal, Aug. 1, 1906.		Principal, July 31, 1907.	
$10,800,996.10	. . Amounts brought forward, ...		$10,946,991.81

LAWRENCE SCIENTIFIC SCHOOL FUNDS.

374.28	**Edward Austin** Loans repaid (bal.),	$1,080.58	
30,686.85	**John B. Barringer** (1873), . . .	30,686.85	
27,324.83	**George H. Emerson** Scholarship (1903), ...	27,836.09	
5,794.12	**George A. Gardner** (1892), . .	5,816.87	
11,045.24	**Hennen Jennings** Scholarship (1898),	11,162.55	
61,536.43	**Abbott Lawrence** (1859), . . .	61,536.43	
50,375.00	**James Lawrence** (1865), ...	50,375.00	
	Lawrence Scientific School Association Scholarship (balance), . . .	150.00	
188.00	**Lawrence** Scientific School Loans repaid (balance), ...	833.26	
197.50	**Susan B. Lyman** Loan (L. S. S.) (balance), ...	295.52	
40,805.73	Professorship of Engineering (1847),	40,805.73	
25,000.00	**Arthur Rotch** (1895), ...	25,000.00	
	Shaler Memorial (1907), ...	32,288.64	
6,156.28	**Stuart Wadsworth Wheeler** (1898),	6,371.54	294,239.01

GRADUATE SCHOOL OF APPLIED SCIENCE FUNDS.

250.00	**Warren Delano Jr.** Loan Scholarship. Gift (balance), ...	$250.00	
250.00	**E. D. Peters** Scholarship. Gift (bal.),	250.00	500.00

MUSEUM OF COMPARATIVE ZOÖLOGY FUNDS.

35,714.52	Museum of Comparative Zoölogy (bal.),	$32,074.13	
297,933.10	**Agassiz** Memorial (1875), ...	297,933.10	
7,594.01	Teachers' and Pupils' (1875), . . .	7,594.01	
5,567.89	**Virginia Barret Gibbs** Scholarship (1892), ...	5,841.28	
50,000.00	**Gray** Fund for Zoölogical Museum (1859), ...	50,000.00	
107,934.77	**Sturgis Hooper** (1865), ...	108,087.41	
7,740.66	**Humboldt** (1869), ...	7,740.66	
5,000.00	**Willard Peele Hunnewell** (1901),	5,000.00	
117,469.34	Permanent (1859), ...	117,469.34	631,739.93

GERMANIC MUSEUM FUNDS.

19,315.00	**Emperor William** (1906), . . .	$26,285.00	
505.15	Unrestricted Gift (balance), . . .	408.97	26,693.97
$11,715,754.80	. . Amounts carried forward, ...		$11,900,164.72

Principal, Aug. 1, 1906.		Principal, July 31, 1907.	
$11,715,754.80	. . Amounts brought forward, ...		$11,900,164.72
	PEABODY MUSEUM OF AMERICAN ARCHAEOLOGY AND ETHNOLOGY FUNDS.		
12,508.70	**Hemenway** Fellowship (1891), .	$12,922.89	
28,355.56	**Peabody** Building (1866), . . .	28,355.56	
47,335.10	**Peabody** Collection (1866), . . .	47,335.10	
47,546.64	**Peabody** Professor (1866), . . .	47,594.43	
30,171.24	**Thaw** Fellowship (1890), ...	30,179.43	
10,413.09	**Henry C. Warren** Exploration (1899), ...	10,418.37	
5,000.00	**Susan Cornelia Warren** (1902),	5,000.00	
5,801.57	**Robert C. Winthrop** Scholarship (1895), ...	5,861.45	
20,725.63	**Huntington Frothingham Wolcott** (1891), ...	20,912.21	
416.66	Anonymous Gift for South American Expedition (balance), ...	108.71	208,688.15
	MEDICAL SCHOOL FUNDS.		
	Harvard Medical Alumni (1907),	$2,509.54	
10,059.25	Anonymous Fund in the Department of Theory and Practice (1906), .	10,153.15	
11,573.60	**Edward Austin** (Bacteriological Laboratory) (1899), ...	11,474.00	
25,512.68	**Edward M. Barringer** (1881),	25,512.68	
119,515.13	**Robert C. Billings** (1900), . .	100,000.00	
6,242.36	**J. Ingersoll Bowditch** (1889),	6,433.95	
1,477.86	**Boylston** Fund for Medical Books (1800), ...	1,532.97	
22,437.89	**John B. & Buckminster Brown** Endowment (1896), ...	23,039.60	
50,888.75	**Bullard** Professorship of Neuropathology (1906), ...	50,651.80	
94,033.35	**Caroline Brewer Croft** (1899),	94,023.59	
383,573.64	**Calvin and Lucy Ellis** (1899),	384,448.40	
205,824.11	**George Fabyan** Foundation for Comparative Pathology (1906), .	207,382.29	
1,836.08	**Samuel E. Fitz** (1884), ...	1,836.08	
3,743.23	**F. B. Greenough** (Surgical Research) (1901), ...	4,444.39	
102,777.16	**George Higginson** Professorship (1902), ...	103,823.51	
	John Homans Memorial (1906),	51,554.01	
69,192.65	**Jackson** Professorship of Clinical Medicine (1859), ...	69,192.65	
96,127.75	**Henry Jackson** Endowment, . .	98,347.63	
$13,128,844.48	. . Amounts carried forward, . .	$1,246,360.24	$12,108,852.87

Principal, Aug. 1, 1906.		Principal, July 31, 1907.	
$13,128,844.48	. . Amounts brought forward, . .	$1,246,360.24	$12,108,852.87
	Walter Augustus Lecompte Professorship of Otology (1907),	50,181.87	
2,026.12	Medical Library (1872), ...	2,125.60	
53,041.05	**William O. Moseley** (1897), . .	53,145.36	
38,750.00	New Subscription (1888), ...	38,750.00	
	Lyman Nichols (1907), ...	10,020.18	
426,894.05	**Henry L. Pierce** (Residuary) (1898),	71,947.44	
56,244.54	**Proctor** (1903), ...	56,027.97	
1,177,358.92	**John D. Rockefeller** Gift (1902),	1,000,000.00	
5,573.63	Gift for Pathological Laboratory, .	5,783.96	
9,335.94	**Dr. Ruppaner** (1897), ...	9,335.94	
	Henry Francis Sears Fund for Pathology (1907), ...	35,000.00	
77,000.00	**George C. Shattuck** (1853), . .	77,000.00	
	James Skillen Memorial Fund (1907), ...	10,857.39	
115,298.91	**James Stillman** Professorship (1902), ...	115,960.09	
5,341.58	School of Comparative Medicine (1899), ...	5,603.87	
6,889.18	Surgical Laboratory (1897), ...	6,796.40	
15,765.11	**Mary W. Swett** (1884), ...	15,765.11	
20,000.00	**Samuel W. Swett** (1884), . . .	20,000.00	
2,000.00	**Quincy Tufts** (1879), ...	2,000.00	
13,651.12	**Warren** Fund for Anatomical Museum (1848), ...	12,391.55	
	Edward Wigglesworth Professorship of Dermatology (1907),	50,829.78	
41,896.00	**Charles Wilder** (1900), ...	41,964.00	
39,154.85	**Henry Willard Williams** (1893),	41,077.36	
1,005.12	Medical School Real Estate (special balance), ...	....	
683.53	Gifts for Anatomical Research (bal.),	491.66	
1,835.23	Gifts for Biological Chemistry (bal),	3,921.93	
200.19	Gift for Pathological Dep't. (bal.),	4,333.82	
3,073.80	Sundry Gifts (balances), ...	1,486.75	
	FELLOWSHIP FUNDS.		
	Anonymous Gift for Teaching Fellowships in Histology and Embryology (balance), ...	8.32	
5,446.22	**Geo. Cheyne Shattuck** Memorial (1891), ...	5,488.62	
5,812.72	**Charles Eliot Ware** Memorial (1891), ...	5,873.14	
5,396.80	**John Ware** Memorial (1891), . .	5,436.79	
$15,258,519.09	. . Amounts carried forward, . .	$3,005,965.14	$12,108,852.87

Principal, Aug. 1, 1906.		Principal, July 31, 1907.	
$15,258,519.09	. . Amounts brought forward, . .	$3,005,965.14	$12,108,852.87
	SCHOLARSHIP FUNDS.		
5,176.53	Anonymous Aid (1905), ...	5,230.72	
5,250.95	**Lucius F. Billings** (1900), . .	5,308.77	
	James Jackson Cabot (1906),	6,245.50	
5,840.66	**David Williams Cheever** (1889),	5,877.45	
3,216.66	**Cotting** Gift (1900), ...	3,249.62	
2,935.00	**Orlando W. Doe** (1893), . . .	2,939.11	
151.58	**John Foster** income for Medical Students (balance), ...	51.58	
5,712.15	**Lewis** and **Harriet Hayden** (1894),	5,720.11	
6,548.66	**Claudius M. Jones** (1893), . .	6,620.22	
5,513.87	**Alfred Hosmer Linder** (1895),	5,584.61	
8,768.34	**Joseph Pearson Oliver** (1904),	8,873.85	
5,761.73	**Charles B. Porter** (1897), . . .	5,819.64	
5,019.45	**Charles Pratt Strong** (1894), .	5,165.88	
6,579.85	**Isaac Sweetser** (1892), ...	6,652.93	
5,415.66	**John Thomson Taylor** (1899),	5,481.59	
5,535.78	**Edward Wigglesworth** (1897),	5,607.60	
	PRIZE FUNDS.		
3,964.29	**Boylston** (1803), ...	4,146.42	
7,843.30	**William H. Thorndike** (1895),	8,228.39	3,102,769.18
	DENTAL SCHOOL FUNDS.		
12,958.11	Dental School (balance), ...	$14,195.67	
2,265.85	Dental School Endowment (1880), .	2,265.85	
23,000.00	**Henry C. Warren** Endowment (1889),	23,000.00	
13,622.98	Gifts for Building (1892), ...	17,386.79	
1,622.42	**Harvard** Dental Alumni (1906), .	3,150.53	
404.55	Dental School Real Estate (balance),	563.31	60,562.15
	OBSERVATORY FUNDS.		
50,370.00	Advancement of Astron. Science (1901),	$50,455.00	
18,815.01	Advancement of Astron. Science (1902),	17,829.40	
5,000.00	**Thomas G. Appleton** (1884), .	5,000.00	
2,500.00	**J. Ingersoll Bowditch** (1889), .	2,500.00	
200,000.00	**Uriah A. Boyden** (1887), . . .	200,000.00	
2,272.51	**Draper Memorial** (balance), . .	1,556.67	
2,000.00	**Charlotte Harris** (1877), . . .	2,000.00	
45,000.00	**Haven** (1898), ...	45,000.00	
21,000.00	**James Hayward** (1866), . . .	21,000.00	
50,000.00	Observatory Endowment (1882), .	50,000.00	
50,000.00	**Paine** Professorship (1886), . . .	50,000.00	
273,932.07	**Robert Treat Paine** (1886), . .	273,932.07	
110,293.88	**Edward B. Phillips** (1849), . .	110,293.88	
14,794.67	**Josiah Quincy** (1866), ...	15,521.10	
40,138.28	**David Sears** (1845), ...	41,123.67	
13,380.00	**Augustus Story** (1871), ...	13,380.00	
42.35	Gift for publishing lunar photographs,	42.35	
	Bond Gifts (balance), ...	2,086.96	901,721.10
$16,301,166.23	. . Amounts carried forward, ...		$16,173,905.25

Principal, Aug. 1, 1906.		Principal, July 31, 1907.	
$16.301,166.23	. . Amounts brought forward, ...		$16,173,905.25
	BUSSEY INSTITUTION FUNDS.		
28,826.48	**Bussey** Institution (balance), . .	$30,731.07	
18,115.23	Woodland Hill (1895), ...	17,783.21	48,514.28
	ARNOLD ARBORETUM FUNDS.		
125,815.00	**Arnold** Arboretum (1899), ...	$126,560.00	
160,867.14	**James Arnold** (1872), ...	161,262.07	
29,385.15	Arboretum Construction Gifts (balance),	25,000.05	
12,500.00	**Robert Charles Billings** (1904),	12,500.00	
22,992.49	**William L. Bradley** (1897), . .	22,984.58	
2,308.06	**Bussey** Fund for the **Arnold** Arboretum (1903), ...	2,308.06	
20,000.00	**Francis Skinner** (1906), ...	20,000.00	
24.85	Gift for books (balance), ...	2,482.56	
	Gift for Expedition to China (balance),	11,066.79	384,164.11
	OTHER FUNDS FOR SPECIAL PURPOSES.		
	PHILLIPS BROOKS HOUSE.		
10,506.66	**Phillips Brooks** House Endowment (1901), ...	$10,506.66	
11,343.64	**Ralph H. Shepard** (1900), . . .	11,343.64	
6,888.76	**Ralph Hamilton Shepard** Memorial (1898), ...	6,437.36	
5,776.73	**John W. and Belinda L. Randall** (1897), ...	5,960.38	
	WILLIAM HAYES FOGG ART MUSEUM.		
	Fogg Art Museum (balance), . . .	105.87	
50,000.00	**William Hayes Fogg** (1892), .	50,000.00	
16,573.77	**Gray** Fund for Engravings (1858),	16,634.51	
17,831.69	**William M. Prichard** (1898), .	18,358.41	
34,620.77	**John Witt Randall** (1892), . . .	35,181.18	
	STILLMAN INFIRMARY.		
1,096.74	**Stillman** Infirmary (balance), . .	1,458.04	
6,430.44	**Stillman** Infirmary Gift (balance),	6,746.15	
54,946.60	**Robert Charles Billings,** for **Stillman** Infirmary (1903), . .	57,644.50	
5,855.84	Free Bed Fund of the **Class of 1868** (1898), ...	6,143.37	
592.73	Free Bed Fund for **Stillman** Infirmary (1900), ...	621.85	
3,296.82	**Herbert Schurz** Memorial Free Bed (1903), ...	3,458.70	
2,907.40	**Henry P. Walcott** (1901), . . .	3,050.13	
$16,950,669.22	. . Amounts carried forward, . . .	$233,650.75	$16,606,583.64

Principal, Aug. 1, 1906.		Principal, July 31, 1907.	
$16,950,669.22	. . Amounts brought forward, . . .	$233,650.75	$16,606,583.64
	CLASS FUNDS.		
1,482.23	Fund of the **Class of 1834** (1887),	1,545.90	
8,661.67	" " " **1844** (1896),	9,027.83	
11,387.10	" " " **1846** (1905),	11,946.20	
3,725.00	" " " **1853** (1887),	3,725.00	
7,855.50	" " " **1856** (1904),	7,885.68	
	CONSTRUCTION GIFTS.		
421.74	Brighton Marsh Fence (balance), . .	421.74	
442.43	Semitic Building, " . .	442.43	
159.47	**John Simpkins** Hall, " . .	159.47	
294,093.50	**George Smith** Bequest (1904), .	310,151.24	
32,790.06	Gift for new University Library Building (balance), ...	34,400.05	
	SUNDRY FUNDS.		
481,015.07	**Edward Austin** (1899), ...	482,783.15	
50,000.00	**Bright** Legacy (1880), ...	50,000.00	
15,038.08	Bursar's Sundry Accounts (balance),	8,915.69	
392,710.18	**Bussey** Trust (1861), ...	392,710.18	
164,487.94	**Calvin** and **Lucy Ellis** Aid (1899),	164,840.92	
3,171.50	**John Foster** (1840), ...	3,171.50	
598,969.63	Gains and Losses for General Investments (1891), ...	601,356.70	
794,942.67	**Price Greenleaf** (1887), ...	794,942.67	
29,939.33	**Henry Harris** (1883), ...	29,939.33	
1,452.77	**Harvard** Memorial Society (1898),	1,524.11	
55,762.48	**Robert Troup Paine** (1880), . .	57,430.10	
42,000.00	**James Savage** (1873), ...	42,000.00	
11,553.10	Gifts for Semitic Museum Collection (balance), ...	16,572.71	
3,584.73	Gifts for Excavations in Palestine (balance), ...	1,050.36	
	Gifts for Chinese Students (balance),	7.00	
137.96	Gifts for Cuban Teachers (balance),	85.96	
	Sundry balances, ...	3,895.81	3,264,582.48
	FUNDS IN TRUST FOR PURPOSES NOT CONNECTED WITH THE COLLEGE.		
16,665.80	**Daniel Williams** (1716), ...	$16,683.67	
4,792.55	**Sarah Winslow** (1790), ...	4,800.13	21,483.80
$19,977,911.71			$19,892,649.92

RECEIPTS AND PAYMENTS FOR DEPARTMENTS.

The following tables are intended to show in detail the resources and expenditures of each Department of the University. The receipts include every gift and the income of every Fund. The payments include every payment for the specific object of every gift and Fund. The items are stated separately except in the case of payments for a general object such as salaries, in which case the payments are merged under the general heading. These tables are not found in the Treasurer's books, but are a transcript from the books and form a balanced statement, as shown on page 136.

If the income of a restricted Fund in any year is not wholly used, the surplus is added to the principal and the addition is temporary or permanent according to the terms of the restriction. Thus there may be a surplus in the restricted income of a Department and yet a deficit in its general account. (The general accounts are shown on pages 8 to 16.) If payments on account of a restricted Fund in any year exceed the income available, the excess is treated as a loan or "advance" from General Investments, which must be repaid from the future income of the Fund. If a gift for immediate use is not wholly spent before the end of the year, the balance is included in the statement of "Funds and Balances" beginning on page 62.

TABLE NO. I.

THE UNIVERSITY.

RECEIPTS.

Gifts for capital account.		
R. H. Eddy Fund (additional),	$1.00	
Edward Erwin Coolidge Fund,	9,000.00	$9,001.00
Income of the following Funds: —		
Band Music,	$56.12	
William H. Baldwin, Jr.	98.20	
Andrew Bigelow,	243.04	
Stanton Blake,	245.50	
Charlotte F. Blanchard,	234.26	
Samuel D. Bradford,	257.78	
James C. Carter,	4,910.00	
John W. Carter,	369.09	
Edward Erwin Coolidge (part, see p. 88),	200.00	
Thomas Cotton,	7.61	
John Cowdin,	1,661.30	
George B. Dorr,	3,424.21	
George Draper,	1,430.86	
R. H. Eddy,	1,676.78	
Harvard Ellis,	4,970.15	
Richard W. Foster,	1,227.50	
John Davis Williams French,	157.15	
Gore,	1,010.04	
John C. Gray,	738.19	
Henry Harris (½ income, see p. 111),	735.00	
Walter Hastings,	728.48	
Henry L. Higginson,	982.00	
George Baxter Hyde,	245.50	
Leonard Jarvis,	828.42	
Henry P. Kidder,	491.00	
Joseph Lee,	295.27	
Theodore Lyman,	491.00	
Israel Munson,	773.32	
Henry S. Nourse (part, see p. 131),	1,466.13	
Francis E. Parker,	3,360.75	
William Perkins,	1,473.00	
Henry L. Pierce (Residuary) (part, see pp. 104, 122),	657.81	
President's,	3,124.72	
Retiring Allowance,	17,991.03	
John L. Russell,	1,147.47	
Isaac Sweetser,	2,303.42	
Seth Turner,	245.50	
William F. Weld,	2,952.76	
Amounts carried forward,	$63,210.36	$9,001.00

TABLE NO. I, THE UNIVERSITY, CONTINUED.

RECEIPTS.

Amounts brought forward,	$63,210.36	$9,001.00
Gift from the **Carnegie** Foundation, to pay retiring allowances granted to persons connected with **Harvard** University,	5,454.54	
Care of the **Sarah Winslow** Fund,	5.88	
Sale of catalogues, calendars, directories, &c.,	1,179.00	
" sand,	50.00	
Use of houses by College officers,	1,550.00	
Use of land by **Harvard** Union,	1,260.00	
Repayment for expenses in excess of cost,	178.33	
" of sewer assessment,	27.00	72,915.11
		$81,916.11

PAYMENTS.

Overseers' Expenses.			
Printing President's Annual Report,		$1,216.14	
" Treasurer's " "		482.06	
" other reports, ballots, etc.,		163.80	
Advertising,		75.73	
Auditing Treasurer's accounts,		150.00	
Other expenses,		39.58	$2,127.31
Office Expenses.			
President's,			
Clerical services,	$1,619.50		
Other expenses,	606.30	$2,225.80	
Treasurer's,			
Clerical services,	$2,116.30		
Rent of safes,	600.00		
Other expenses,	976.45	3,692.75	
Bursar's,			
Clerical services,	$5,150.94		
Other expenses,	1,723.41	6,874.35	
Publication Agent's,			
Clerical and other services,	$2,259.66		
Postage and stationery,	901.38		
Other expenses,	744.88	3,905.92	
Inspector of Grounds and Buildings,			
Clerical and other services,	$898.89		
Improvements and repairs,	18.16		
Other expenses,	474.96	1,392.01	
Janitor's,			
Sundry expenses,		63.32	
Corporation Rooms (fuel, rent, &c.),		2,548.89	20,703.04
Amount carried forward,			$22,830.35

TABLE No. I, THE UNIVERSITY, CONTINUED.

PAYMENTS.

Amount brought forward,			$22,830.35
Salaries.			
President,			
From the University,	$6,000.00		
" President's Fund,	3,021.75		
" Thomas Cotton Fund,	7.35	$9,029.10	
Treasurer,		6,000.00	
Comptroller,		2,500.00	
Bursar,		4,000.00	
Assistant Bursar,		2,250.00	
Secretary to the Corporation,		3,000.00	
Assistant Secretary to the Corporation,		250.00	
Secretary of the Board of Overseers,		200.00	
Commencement Marshal,		100.00	
Secretary for Appointments,		1,499.99	
Regent,		1,000.00	
Medical Visitor,		3,500.00	
Publication Agent,		2,500.00	
Inspector of Grounds and Buildings,		3,500.00	
Clerks, Treasurer's office,		3,500.00	
Bursar's Assistant,		2,000.00	44,829.09
Retiring Allowances.			
From **Carnegie** Foundation (gift),		$5,454.54	
" Retiring Allowance Fund,		17,991.03	
" University income,		2,016.91	25,462.48
Memorial Hall and Sanders Theatre.			
Janitor service,		$184.67	
Lighting,		42.24	
Heating,		2.37	
Supplies,		8.50	
Repairs,		74.33	
Other expenses,		84.04	396.15
Payments made from University income on the following accounts:—			
Appleton Chapel (part, see Table XIX, page 128),		$6,361.22	
Phillips Brooks House (part, see Table XX, page 129),		1,857.02	
William Hayes Fogg Art Museum (part, see Table XVII, page 126),		2,927.08	
Germanic Museum (part, see Table XVI, page 125),		75.32	
Peabody Museum of American Archaeology and Ethnology (part, see Table XIV, page 124),		1,350.95	
Semitic Museum (part, see Table XV, page 125),		1,500.00	14,071.59
Amount carried forward,			$107,589.66

Table No. I, The University, continued.

PAYMENTS.

Amount brought forward,			$107,589.66
General Expenses.			
Labor,		$8,009.82	
Watchmen,		2,067.00	
University Gazette,		878.75	
Annual Catalogue,		2,921.21	
Quinquennial Catalogue,		580.44	
Expenses of Medical Visitor,		139.12	
Diplomas,		39.40	
Commencement Day expenses,		646.15	
Expenses on portraits in Memorial Hall,		9.72	
Printing the President's Speech on the Taxation of Colleges,		173.99	
Association of American Universities, conference,		115.84	
Celebration in Cambridge upon opening the new buildings of the Medical School,		426.34	
Other hospitality,		250.83	
Expenses of delegates to the Carnegie Institution,		44.70	
Legal services,		1,710.00	
Advertising,		75.64	
Insurance,		42.31	
Telephone,		15.00	
Mercantile agency,		825.00	
Fence,		20.17	
Plank walks,		208.80	
Driveways and gravel walks,		50.73	
Watering driveways and streets,		422.19	
Repairs and improvements,		5,203.49	
Taxes on **Harvard** Union,	$4,743.00		
Less repaid by **Harvard** Union,	4,743.00		
To the City of Cambridge, towards the cost of improving the portion of Broadway and Kirkland streets adjacent to the Yard,		10,000.00	
Freight, supplies, and sundries,		699.18	35,575.82
			$143,165.48

TABLE NO. II.

THE COLLEGE.

RECEIPTS.

Gifts for Capital Account.		
Martin Brimmer Fund,	$50,000.00	
Francis James Child Memorial Fund (additional),	50.00	
Twenty-fifth Anniversary Fund of the **Class of 1881** (additional),	10,596.43	
Fund of the **Class of 1882**,	53,863.36	
Class Subscription Fund (additional),	20.00	
German Professorship Fund,	350.00	
Edwin A. W. Harlow Fund (additional),	9,285.48	
Boston Newsboys' Fund,	2,667.16	
William Reed Fund,	4,000.00	
Nelson Robinson Jr. Additional Fund (additional),	25,000.00	
Shaler Memorial Fund,	32,238.23	
Teachers' Endowment Fund (additional),	89,269.00	
Jerome Wheelock Fund (additional),	10.00	
Willard Scholarship Fund,	10,000.00	$287,349.66
Income of Funds for Instruction, and Gifts for Salaries.		
Alford Professorship,	$1,362.48	
John B. Barringer,	1,506.73	
Boylston Professorship,	1,391.35	
Martin Brimmer,	2,148.13	
Class of 1880 (part, pp. 104, 121),	3,590.13	
Class Subscription,	7,395.54	
Paul Dudley,	185.06	
Eaton Professorship,	5,229.94	
Eliot Professorship,	1,061.49	
Eliot " **(Jon. Phillips' Gift),**	350.00	
Calvin and **Lucy Ellis** Aid (part, see p. 88),	4,841.62	
Erving Professorship,	171.85	
Fisher "	1,767.16	
Henry Flynt,	20.57	
Fund for Permanent Tutors,	797.38	
Godkin Lecture,	665.65	
Gospel Church (⅓ income, see p. 131),	170.64	
Asa Gray Professorship,	1,053.24	
Gurney (part, see p. 181),	8,656.34	
Hersey Professorship (⅔ income, see p. 111),	595.60	
Hersey Professorship (**Thomas Lee's** gift),	1,067.63	
Hollis " (Divinity),	1,694.83	
Hollis " (Mathematics),	183.92	
Amounts carried forward,	$45,907.78	$287,349.66

TABLE NO. II, THE COLLEGE, CONTINUED.

RECEIPTS.

Amounts brought forward, ...	$45,907.78	$287,349.66
Income of Funds for Instruction, and Gifts for Salaries (*continued*).		
Ingersoll Lecture (part, see p. 90), ...	226.17	
Abbott Lawrence, ...	3,021.42	
James Lawrence, ...	2,478.41	
Lectures on Political Economy, ...	584.31	
Henry Lee Professorship, ...	5,405.18	
Thomas Lee, for Reading, ...	775.63	
Arthur T. Lyman, ...	1,227.50	
• **McLean** Professorship, ...	2,114.39	
William Belden Noble Lectures, ...	1,204.67	
Francis Greenwood Peabody (part, see p. 90), ...	1,450.00	
Daniel H. Peirce, ...	708.80	
Perkins Professorship, ...	1,031.10	
Plummer Foundation, ...	1,228.48	
Pope Professorship, ...	2,577.75	
Professorship of Engineering, ...	2,003.58	
Professorship of Hygiene (part, see p. 131), . .	9,389.69	
Nelson Robinson Jr. (part, see pp. 85, 90), .	21,090.59	
" " " Additional (part, see p. 90),	1,000.00	
Arthur Rotch, ...	1,227.50	
Rumford Professorship, ...	2,767.72	
Gurdon Saltonstall, ...	2,946.00	
Smith Professorship, ...	1,136.18	
Josiah Stickney, ...	616.70	
Teachers' Endowment, ...	91,320.89	
Unknown Memorial (part, see p. 90), ...	3,206.83	
Henry Villard, ...	1,476.38	
Henry W. Wales (part, see p. 103).		
Wales Professorship, ...	1,500.00	
Henry C. Warren (part, see p. 90), ...	4,000.00	
Sylvester Waterhouse, ...	316.25	
David A. Wells (part, see pp. 89, 90), . . .	4,250.00	
Jerome Wheelock, ...	1.92	
Gifts for salaries and lectures, ...	2,325.00	220,456.77
Income of Funds for General Purposes.		
John W. P. Abbot (accumulating), ...	$529.30	
John A. Blanchard, ...	51.56	
Edward W. Codman, ...	16,070.44	
Jonathan Phillips, ...	1,546.65	
William M. Spackman, ...	122.75	
Twenty-fifth Anniversary Fund of the **Class of 1881,**	4,680.80	23,001.50
Amount carried forward, ...		$530,807.93

TABLE NO. II, THE COLLEGE, CONTINUED.

RECEIPTS.

Amount brought forward, ...			$530,807.98
Income of Fellowship Funds, and Gifts for Fellowships.			
Julia Amory Appleton, ...		$989.76	
Edward Austin (part, see pp. 85, 88, 111, 116).			
Edward Austin Fellowships, ...		2,000.00	
Austin Teaching "		11,275.00	
Cercle Français de l'Université **Harvard** (gift),		600.00	
George W. Dillaway, ...		262.64	
Ozias Goodwin Memorial, ...		559.50	
Harris, ...		536.37	
Edward William Hooper, ...		1,282.20	
John Thornton Kirkland, ...		562.24	
Henry Lee Memorial, ...		587.43	
Charles Eliot Norton, ...		600.69	
Robert Treat Paine, ...		643.46	
John Parker, ...		2,900.24	
Francis Parkman, ...		505.53	
Nelson Robinson Jr. (part, see pp. 84, 90).			
Nelson Robinson Jr. Fellowship, . . .		500.00	
Rogers, ...		1,605.86	
Henry Bromfield Rogers Memorial, . . .		601.13	
South End House (gifts), ...		350.00	
John Tyndall, ...		587.73	
James Walker, ...		567.89	
Whiting, ...		1,171.03	28,688.70
Income of Scholarship Funds, and Gifts for Scholarships.			
Abbot, ...		$188.94	
Alford (accumulating), ...		111.85	
Edward Austin (part, see pp. 85, 88, 111, 116).			
Austin Scholarships in Architecture, . . .		300.00	
" " for Teachers, ...		3,100.00	
Bartlett, ...		265.43	
Bassett, ...		278.99	
Bigelow, ...		662.08	
Borden (accumulating), ...		139.69	
Bowditch, ...		5,638.84	
Bright Scholarships.			
Interest on balance, ...	$185.30		
Bright Legacy (½ income, see p. 103),	1,227.50	1,412.80	
Browne, ...		192.47	
Morey Willard Buckminster, ...		267.25	
Burr, ...		1,683.69	
Ruluff Sterling Choate, ...		303.44	
Amounts carried forward, ...		$14,545.47	$559,496.68

TABLE NO. II, THE COLLEGE, CONTINUED.

RECEIPTS.

Amounts brought forward, ...	$14,545.47	$559,496.63
Income of Scholarship Funds, and Gifts for Scholarships (*continued*).		
Class of 1802, ...	417.50	
“ **1814,**	160.85	
“ **1815 (Kirkland),**	330.39	
“ **1817,**	229.98	
“ **1828,**	174.11	
“ **1835,**	251.15	
“ **1841,**	257.82	
“ **1852 (Dana),**	257.77	
“ **1856,**	791.44	
“ **1867,**	239.41	
“ **1877,**	255.66	
“ **1883,**	301.13	
Crowninshield, ...	602.65	
Warren H. Cudworth (gift), ...	600.00	
Francis H. Cummings, ...	300.00	
George and **Martha Derby,**	274.76	
Julius Dexter, ...	256.94	
Orlando W. Doe, ...	142.05	
Department of Education (gift), ...	500.00	
William Samuel Eliot, ...	271.57	
George H. Emerson (part, see p. 131), . .	1,411.26	
Joseph Eveleth (part, see p. 112), ...	1,453.56	
Fall River, ...	109.00	
Farrar, ...	315.27	
Richard Augustine Gambrill, ...	574.03	
Charles Haven Goodwin, ...	384.36	
Benjamin D. Greene, ...	216.53	
Price Greenleaf (part, see pp. 88, 103, 104).		
Price Greenleaf Scholarships, ...	3,000.00	
Harvard Club of Buffalo (gift), ...	200.00	
“ “ Chicago “	300.00	
“ “ Louisiana (gift), ...	208.51	
“ “ St. Louis “	300.00	
John Appleton Haven, ...	512.85	
William Hilton (part, see p. 112), ...	747.45	
Ebenezer Rockwood Hoar, ...	541.28	
Levina Hoar, for the town of Lincoln, ...	317.24	
R. M. Hodges (part, see p. 104).		
Hodges Scholarship, ...	296.66	
Hollis, ...	315.86	
Henry B. Humphrey, ...	541.38	
Hennen Jennings, ...	542.31	
Amounts carried forward, ...	$33,448.20	$559,496.63

TABLE NO. II, THE COLLEGE, CONTINUED.

RECEIPTS.

Amounts brought forward, ...		$33,448.20	$559,496.63
Income of Scholarship Funds, and Gifts for Scholarships (*continued*).			
Charles L. Jones, ...		1,539.87	
Lawrence Scientific School Association (gift),		150.00	
George Emerson Lowell, ...		523.75	
Markoe, ...		266.07	
Matthews Scholarships.			
Interest on balance, ...	$192.57		
Matthews Hall, half net rents, . .	4,845.74	5,038.31	
William Merrick, ...		310.46	
Morey, ...		415.63	
Lady Mowlson, ...		291.66	
Boston Newsboys'. Income, ...	$103.65		
Gift, ...	50.00	153.65	
Howard Gardner Nichols, ...		285.22	
Lucy Osgood, ...		304.18	
George Foster Peabody, ...		316.20	
Pennoyer, ...		336.53	
Rebecca A. Perkins, ...		220.12	
Philadelphia, ...		540.79	
Wendell Phillips Memorial, ...		80.18	
William Reed, ...		77.50	
Ricardo Prize (gift), ...		350.00	
Rodger, ...		62.80	
Henry Bromfield Rogers, ...		173.81	
Edward Russell, ...		287.92	
Sales, ...		282.37	
Saltonstall, ...		562.24	
Leverett Saltonstall, ...		428.89	
Mary Saltonstall, ...		348.36	
James Savage (part, see pp. 104, 121).			
Savage Scholarship, ...		300.00	
Sever, ...		160.31	
Sewall, ...		559.15	
Shattuck, ...		2,447.54	
Slade, ...		304.42	
Dunlap Smith, ...		201.13	
Story, ...		225.86	
Stoughton. Use of pasture, ...	$100.00		
Interest, ...	94.47	194.47	
Swift, ...		190.75	
Thayer, ...		3,956.43	
Gorham Thomas, ...		214.57	
Amounts carried forward, ...		$55,549.34	$559,496.63

TABLE No. II, THE COLLEGE, CONTINUED.

RECEIPTS.

Amounts brought forward, . . .		$55,549.34	$559,496.63
Income of Scholarship Funds and Gifts for Scholarships (*continued*).			
Toppan, ...		385.58	
Townsend, ...		1,281.51	
Walcott, ...		251.98	
Christopher M. Weld, ...		532.59	
Jacob Wendell, ...		270.05	
Whiting, ...		586.21	
Josiah Dwight Whitney, ...		249.67	
Mary L. Whitney, ...		576.57	
Willard Scholarship, ...		61.38	
Charles Wyman, ...		500.97	
Anonymous Gift for Scholarship use, ...		100.00	60,345.80
Income of Beneficiary and Loan Funds, and Repayments.			
Rebecca C. Ames.			
Interest, ...	$2,561.84		
Loan repaid, ...	105.00	$2,666.84	
Nathaniel Appleton, ...		31.03	
Edward Austin (see pp. 85², 111, 116).			
For Loans, ...	$4,442.84		
Loans repaid by Special Students, .	40.00	4,482.84	
Edward Austin Loans Repaid (L. S. S.), . .		1,900.85	
Frank Bolles Memorial, ...		97.86	
William Brattle, ...		77.48	
Daniel A. Buckley, ...		7,762.56	
Walter Channing Cabot, ...		2,490.20	
Edward Erwin Coolidge (part, see p. 79),		500.00	
Thomas Danforth, ...		52.93	
Moses Day, ...		267.55	
Calvin and **Lucy Ellis** Aid (part, see p. 83),		2,217.98	
John Ellery, ...		22.19	
Exhibitions, ...		65.45	
Thomas Fitch, ...		40.31	
Ephraim Flynt, ...		23.91	
Henry Flynt, ...		8.30	
Henry Gibbs, ...		24.84	
John Glover, ...		164.68	
Price Greenleaf (part, see pp. 86, 103, 104).			
Price Greenleaf Aid. Interest,	$17,265.65		
Repayment, ...	100.00	17,365.65	
Edwin A. W. Harlow, ...		316.99	
Edward Holyoke, ...		18.56	
Amounts carried forward, ...		$40,599.00	$619,842.43

TABLE NO. II, THE COLLEGE, CONTINUED.

RECEIPTS.

Amounts brought forward, . . .		$40,599.00	$619,842.48
Income of Beneficiary and Loan Funds, and Repayments (*continued*).			
Robert Keayne, ...		119.85	
Bertram Kimball, ...		1,227.50	
Lawrence Scientific School Loan, repayments,		1,172.26	
Mary Lindall, ...		51.90	
Susan B. Lyman, ...		294.06	
Anne Mills, ...		11.64	
Munroe, ...		535.53	
Palfrey Exhibition, ...		101.93	
Dr. Andrew P. Peabody Memorial.			
Interest, ...	$244.52		
Repayment, ...	50.00	294.52	
Scholarship and Beneficiary Money Returned.			
Loans repaid, ...		1,286.56	
Joseph Sewall, ...		11.10	
Alexander W. Thayer (part, see p. 131), .		267.84	
Quincy Tufts, ...		547.71	
Benjamin Wadsworth, ...		14.98	
Stuart Wadsworth Wheeler.			
Interest, ...	$302.26		
Loans repaid, ...	3.00	305.26	
Anonymous Gift for beneficiary use in the Graduate School of Arts and Sciences, ...		200.00	47,041.64
Income of Prize Funds, and gifts for prizes.			
Jeremy Belknap (gift), ...		$50.00	
James Gordon Bennett, ...		82.24	
Philo Sherman Bennett, ...		20.72	
Francis Boott (part, see p. 90), ...		190.00	
Bowdoin Prizes for Dissertations, ...		1,542.48	
Boylston Prizes for Elocution, ...		158.74	
Coolidge Debating, ...		265.24	
Lloyd McKim Garrison, ...		132.28	
Edward Hopkins Gift for "Deturs."			
From Trustees, ...	$206.47		
Interest on balance, ...	96.38	302.85	
Sales, ...		53.72	
John O. Sargent, ...		128.69	
George B. Sohier (part, see p. 103), ...		250.00	
Charles Sumner, ...		186.19	
Robert N. Toppan, ...		193.65	
Philip Washburn, ...		109.59	
David A. Wells (part, see pp. 84, 90), . . .		560.00	4,226.39
Amount carried forward, ...			$671,110.46

TABLE NO. II, THE COLLEGE, CONTINUED.

RECEIPTS.

Amount brought forward,			$671,110.46
Income of Sundry Funds for Special Purposes.			
Botanic Department (part, see p. 119).			
One-fourth for Cryptogamic Herbarium,		$488.30	
One-eighth for Laboratories of Botany,		244.15	
William H. Baldwin, Jr. 1885,		284.19	
Francis Boott (part, see p. 89),		336.35	
Francis James Child Memorial,		570.69	
Classical Publication Fund of the **Class of 1856.**			
Interest,	$348.86		
Sales,	140.61	489.47	
Book Fund of the **Class of 1881,**		170.87	
George A. Gardner,		284.49	
George Silsbee and **Ellen Sever Hale,**		271.92	
Harvard Oriental Series,		741.51	
Ingersoll Lecture (part, see p. 84),		67.50	
Music Department,		53.37	
Francis Greenwood Peabody (part, see p. 84),		3,675.99	
Nelson Robinson Jr. (part, see pp. 84, 85).			
Interest,	$4,186.91		
Sales,	582.77	4,769.68	
Nelson Robinson Jr. Additional (part, see p. 84),		176.34	
Robert W. Sayles,		251.30	
George William Sawin,		236.42	
Shaler Memorial,		810.64	
John E. Thayer,		817.76	
Elizabeth Torrey,		51.46	
Henry Warren Torrey. Interest,	$568.78		
Sales,	161.47	730.25	
Unknown Memorial (part, see p. 84),		1,800.00	
Cyrus M. Warren,		318.76	
Henry C. Warren (part, see p. 84),		1,654.70	
David A. Wells (part, see pp. 84, 89),		809.00	
Chauncey Wright,		55.34	20,160.45
Sundry Gifts.			
For the Department of Anthropology,		$25.00	
For the Department of Architecture.			
Gift,	$400.00		
Interest,	80.68	480.68	
For the Department of the Classics.			
Sales of publications,		213.33	
For the Department of Economics.			
For books,	$40.00		
For publishing a thesis,	500.00	540.00	
Amounts carried forward,		$1,259.01	$691,270.91

TABLE NO. II, THE COLLEGE, CONTINUED.

RECEIPTS.

Amounts brought forward,		$1,259.01	$691,270.91
Sundry Gifts (*continued*).			
For the Department of Geology, for a seismograph,		685.00	
For the Department of Latin, for equipment for "Latin 10,"		200.00	
For the Department of Mining and Metallurgy. Interest,		18.60	
For the Department of Music,		140.00	
For the Department of Sanskrit.			
Interest,	$10.44		
Sales of publications,	582.69	593.13	
For the Philosophical Library			
Gifts,	$24.91		
Interest,	7.99	32.90	
For extra copies of Contributions from the Zoölogical Laboratory,		75.00	
For the Bermuda Biological Station.			
Gifts,	$500.00		
Interest,	34.06	534.06	
Towards the travelling expenses and support at Harvard University of Chinese students in addition to the sixteen students sent by the Chinese Government in 1906–07,		2,500.00	
For publishing Harvard Psychological Studies.			
Gift,	$1,106.02		
Sales,	9.00	1,115.02	
For the School for Social Workers.			
Gift,	$500.00		
Interest,	39.85	539.85	
For the Ethics of the Social Questions. Interest,		4.32	
For furnishings of the Department of Social Ethics in Emerson Hall. Interest,		16.90	
For furnishing Emerson Hall.			
Gift,	$2,500.00		
Interest,	53.42	2,553.42	
For furnishing the Common-Room in Conant Hall.		500.00	
For evening use of Warren House libraries.			
Gift,	$53.00		
Less included in gifts for service in Department Libraries,	40.00	13.00	
For Plantations in the College Yard. Interest,		68.90	10,849.11
Amount carried forward,			$702,120.02

TABLE NO. II, THE COLLEGE, CONTINUED.

RECEIPTS.

	Regular Programme	Additional Courses		
Amount brought forward, ...				$702,120.02
Receipts from students.				
Tuition fees.				
College.				
Regular, ...	$292,620.00	$28,260.71		
Special, ...	35,664.00	1,596.01		
Lawrence Scientific School, ...	29,410.00	594.00		
	$357,694.00	$30,450.72		
Graduate School of				
Arts and Sciences, .	46,285.00	143.34		
Applied Science, . .	4,450.00			
School for Social Workers, ...	253.33			
Radcliffe students in University courses,	2,735.00			
For afternoon and Saturday courses for teachers, . .	2,370.00			
Summer Schools in Cambridge, . . .	22,472.00			
	$436,259.33	$30,594.06	$466,853.39	
Registration fees. Summer Schools in Cambridge.			1,564.00	
Examination fees.				
Admission, ...		$9,395.48		
Condition, make-up and advanced standing, ...		3,483.00		
Doctor of Philosophy, ...		30.00	12,908.48	
Graduation fees, ...			7,840.00	
Laboratory fees.				
Astronomy, ...		$470.00		
Botany, ...		1,210.00		
Chemistry, ...		14,426.71		
Engineering, ...		2,806.50		
Engineering, Squam Lake, . . .		1,935.00		
Geology, ...		1,415.00		
Hygiene, ...		1,670.00		
Mineralogy, ...		375.00		
Mining and Metallurgy, ...		3,106.13		
Philosophy, ...		90.00		
Physics, ...		4,646.00		
Zoölogy, ...		1,477.50	33,627.84	
Amounts carried forward, ...			$522,793.71	$702,120.02

Table No. II, The College, continued.

RECEIPTS.

Amounts brought forward,			$522,793.71	$702,120.02
Receipts from Students (*continued*).				
College dormitories,		$99,678.33		
Less the following items: —				
Receipts from dormitories belonging to University Houses and Lands account, credited under income of the Funds which constitute the principal of this account,	$15,873.33			
One-half net income from Matthews Hall, credited under income of Matthews Scholarships,	4,845.74	20,719.07	78,959.26	
Summer School excursions, surplus,			155.02	601,907.99
Sundries.				
Repayment, balances of special appropriations to be used by Professor Shaler.				
For clerical assistance,		$169.62		
For loans in Lawrence Scientific School,		72.82	$242.44	
Repayment of part of a special appropriation for specimens for the Department of Mineralogy and Petrography,			115.00	
Sale of tickets to Commencement Lunch,			422.00	
“ University Hymn Books,			305.02	
“ Annals of Mathematics,			395.74	
“ Propositions in Geometry,			111.84	
“ Infinite Series,			79.99	
“ Manual of Engineering,			211.15	
“ Elementary Exercises in Physics,			170.45	
“ Hand-book of American History,			137.20	
“ History 1 publications,			524.67	
“ Harvard Economic Studies,			144.79	
“ Report on Examinations in English for Admission,			222.39	
“ old examination papers,			493.22	
“ other publications,			1,034.01	
Sundry receipts at the Engineering Camp at Squam Lake,			8,984.16	
Pasturage, Squam Lake,			55.00	
Interest on bank deposit, Squam Lake account,			41.76	
“ account of tuition fees paid in advance,			2,127.06	
Insurance awards,			30.00	
“ premiums repaid,			17.86	15,865.75
				$1,319,893.76

TABLE NO. II, THE COLLEGE, CONTINUED.

PAYMENTS.

From Fellowship Funds and Gifts.			
Julia Amory Appleton, ...		$1,500.00	
Edward Austin (part, see pp. 94, 97, 116).			
Edward Austin Fellowships, ...		2,000.00	
Austin, Teaching “		11,275.00	
Cercle Français de l'Université **Harvard**, . . .		600.00	
George W. Dillaway, ...		150.00	
Ozias Goodwin Memorial, ...		225.00	
Harris, ...		500.00	
Edward William Hooper, ...		1,750.00	
John Thornton Kirkland, ...		900.00	
Henry Lee Memorial, ...		450.00	
Charles Eliot Norton, ...		600.00	
Robert Treat Paine, ...		500.00	
John Parker, ...		2,250.00	
Francis Parkman, ...		450.00	
Nelson Robinson Jr. (part, see p. 98).			
Nelson Robinson Jr. Fellowship, . . .		500.00	
Rogers, ...		1,087.50	
Henry Bromfield Rogers Memorial, . . .		450.00	
South End House, ...		350.00	
John Tyndall, ...		500.00	
James Walker, ...		500.00	
Whiting, ...		600.00	$27,137.50
From Scholarship Funds and Gifts.			
Abbot, ...		$150.00	
Edward Austin (part, see pp. 94, 97, 113, 116).			
Austin Scholarships in Architecture, ...	$300.00		
Austin Scholarships for Teachers,	3,100.00	3,400.00	
Bartlett, ...		250.00	
Bassett, ...		270.00	
Bigelow, ...		600.00	
Bowditch, ...		5,000.00	
Bright Scholarships, ...		1,125.00	
Browne, ...		150.00	
Morey Willard Buckminster, ...		200.00	
Burr, ...		1,200.00	
Ruluff Sterling Choate, ...		275.00	
Class of 1802, ...		325.00	
“ **1814**, ...		125.00	
“ **1815 (Kirkland)**, ...		250.00	
“ **1817**, ...		175.00	
“ **1828**, ...		150.00	
“ **1835**, ...		185.00	
Amounts carried forward, ...		$13,830.00	$27,137.50

TABLE NO. II, THE COLLEGE, CONTINUED.

PAYMENTS.

Amounts brought forward, . . .	$13,830.00	$27,137.50
From Scholarship Funds and Gifts (*continued*).		
Class of 1841, ...	200.00	
" **1852 (Dana),**	200.00	
" **1856,**	600.00	
" **1867,**	175.00	
" **1877,**	200.00	
" **1883,**	225.00	
Crowninshield, ...	450.00	
Warren H. Cudworth, ...	600.00	
Francis H. Cummings, ...	225.00	
George and **Martha Derby,**	250.00	
Julius Dexter, ...	220.00	
Orlando W. Doe, ...	100.00	
Department of Education, ...	250.00	
William Samuel Eliot, ...	250.00	
George H. Emerson (part, see p. 131), . .	900.00	
Joseph Eveleth (part, see p. 118), ...	1,000.00	
Fall River, ...	80.00	
Farrar, ...	250.00	
Richard Augustine Gambrill, ...	450.00	
Charles Haven Goodwin, ...	300.00	
Greene, ...	150.00	
Price Greenleaf (part, see pp. 97, 104).		
Price Greenleaf Scholarships, ...	3,000.00	
Harvard Club of Buffalo, ...	200.00	
" " Chicago, ...	300.00	
" " Louisiana, ...	208.51	
" " St. Louis, ...	300.00	
John Appleton Haven, ...	480.00	
William Hilton, ...	450.00	
Ebenezer Rockwood Hoar, ...	425.00	
Levina Hoar, for the town of Lincoln, ...	250.00	
R. M. Hodges.		
Hodges Scholarship, ...	250.00	
Hollis, ...	250.00	
Henry B. Humphrey, ...	450.00	
Hennen Jennings, ...	425.00	
Charles L. Jones, ...	1,200.00	
George Emerson Lowell, ...	420.00	
Markoe, ...	150.00	
Matthews, ...	4,680.00	
William Merrick, ...	225.00	
Morey, ...	325.00	
Lady Mowlson, ...	225.00	
Amounts carried forward, . . .	$35,118.51	$27,137.50

TABLE NO. II, THE COLLEGE, CONTINUED.

PAYMENTS.

Amounts brought forward, . . .	$35,118.51	$27,137.50
From Scholarship Funds and Gifts (*continued*).		
Boston Newsboys', ...	150.00	
Howard Gardner Nichols, ...	225.00	
Lucy Osgood, ...	315.00	
George Foster Peabody, ...	150.00	
Pennoyer, ...	155.00	
Rebecca A. Perkins, ...	150.00	
Philadelphia, ...	425.00	
Wendell Phillips Memorial, ...	50.00	
Ricardo Prize, ...	350.00	
Henry Bromfield Rogers, ...	120.00	
Edward Russell, ...	225.00	
Sales, ...	200.00	
Saltonstall, ...	425.00	
Leverett Saltonstall, ...	325.00	
Mary Saltonstall, ...	300.00	
James Savage (part).		
Savage Scholarship, ...	300.00	
Sever, ...	150.00	
Sewall, ...	480.00	
Shattuck, ...	2,040.00	
Slade, ...	290.00	
Dunlap Smith, ...	220.00	
Story, ...	175.00	
Stoughton, ...	100.00	
Thayer, ...	3,240.00	
Gorham Thomas, ...	150.00	
Toppan, ...	300.00	
Townsend, ...	1,000.00	
Walcott, ...	200.00	
Christopher M. Weld, ...	400.00	
Jacob Wendell, ...	300.00	
Whiting, ...	420.00	
Josiah Dwight Whitney, ...	240.00	
Mary L. Whitney, ...	300.00	
Charles Wyman, ...	400.00	
University, Graduate School of Arts and Sciences,	1,890.00	
" " " Applied Science, .	600.00	
" **Lawrence** Scientific School, . . .	1,240.00	
Normal, " " "	600.00	
Architectural League, ...	110.00	53,828.51
From Beneficiary and Loan Funds.		
Rebecca C. Ames, ...	$1,773.00	
Amounts carried forward, ...	$1,773.00	$80,966.01

TABLE NO. II, THE COLLEGE, CONTINUED.

PAYMENTS.

Amounts brought forward, ...		$1,773.00	$80,966.01
From Beneficiary and Loan Funds (*continued*).			
Edward Austin (part, see pp. 94[2], 113, 116).			
Loans to L. S. S. students, . . .	$1,970.00		
" Special " . . .	744.76	2,714.76	
Edward Austin Loans Repaid (L.S.S.), . .		1,194.60	
Frank Bolles Memorial, ...		25.00	
Walter Channing Cabot, ...		2,403.99	
Edward Erwin Coolidge, ...		500.00	
Moses Day, ...		261.01	
Calvin and **Lucy Ellis** Aid.			
Beneficiaries, ...		1,865.00	
Exhibitions, ...		63.85	
Price Greenleaf (part, see pp. 95, 104).			
Price Greenleaf Aid, ...		14,240.66	
Edwin A. W. Harlow, ...		126.12	
Bertram Kimball, ...		1,185.00	
Lawrence Scientific School Loans Repaid, . .		527.00	
Munroe, ...		522.45	
Palfrey Exhibition, ...		80.00	
Dr. Andrew P. Peabody Memorial, ...		179.00	
Quincy Tufts, ...		534.32	
Stuart Wadsworth Wheeler, ...		90.00	
Scholarship and Beneficiary money returned, . .		1,190.11	29,475.87
From Prize Funds and Gifts for Prizes.			
Anonymous gift for a prize essay in the Department of History and Government, ...		$250.00	
Jeremy Belknap, ...		50.00	
Philo Sherman Bennett, ...		40.00	
Francis Boott. Expenses, ...		90.00	
Bowdoin Prizes for Dissertations.			
Prizes, ...	$1,050.00		
Expenses, ...	25.00	1,075.00	
Boylston Prizes for Elocution, ...		255.00	
Coolidge Debating, ...		200.00	
Dante Prize, ...		100.00	
Lloyd McKim Garrison Prize, ...		100.00	
Edward Hopkins Gift for "Deturs," . . .		289.00	
John O. Sargent, ...		100.00	
George B. Sohier (part, see p. 105), ...		250.00	
Robert N. Toppan, ...		150.00	
Philip Washburn, ...		75.00	
David A. Wells (part), ...		560.00	3,584.00
Amount carried forward, ...			$114,025.88

TABLE No. II, THE COLLEGE, CONTINUED.

PAYMENTS.

Amount brought forward, ...			$114,025.88
From Sundry Funds for Special Purposes.			
Francis Boott, books for the Department of Music, ...		$117.67	
Francis James Child Memorial, books, . .		593.66	
Classical Publication Fund of the **Class of 1856.**			
Harvard Studies in Classical Philol.,	$659.43		
Interest on advances, ...	75.28	734.71	
Book Fund of the **Class of 1881,** books for the Department of Chemistry, ...		68.38	
George A. Gardner, photographs, etc., for the Department of Geology, ...		261.74	
George Silsbee and **Ellen Sever Hale,** Studies in Philology and Literature, ...		200.00	
Harvard Oriental Series, publications, ...		624.65	
Ingersoll Lecture (part), printing, ...		67.50	
Francis Greenwood Peabody, ...		2,345.13	
Nelson Robinson Jr. (part, see p. 94).			
Expenses of **Nelson Robinson Jr.** Hall,		4,769.68	
Nelson Robinson Jr. Additional.			
Psychological Laboratory.			
Mechanic, ...	$422.98		
Equipment, ...	472.51		
Sundries, ...	18.51	914.00	
George William Sawin, books for the Department of Mathematics, ...		246.54	
Robert W. Sayles, for the Department of Geology, ...		5.40	
John E. Thayer, Quarterly Journal of Economics, ...		730.47	
Elizabeth Torrey, books for the Department of History, ...		14.70	
Henry Warren Torrey, for printing **Harvard** Historical Studies, ...		1,000.92	
Unknown Memorial (part), services and expenses,		2,126.79	
Cyrus M. Warren, research in Chemistry, .		283.96	
David A. Wells (part), **Harvard** Economic Studies, Vol. II (part), ...		698.87	15,804.77
From Gifts for Special Purposes.			
For the Chinese Government to apply towards the travelling expenses and support at **Harvard** University of Chinese students in addition to the sixteen sent by the Chinese Government in 1906–07, ...		$2,493.00	
Amounts carried forward, ...		$2,493.00	$129,830.65

TABLE NO. II, THE COLLEGE, CONTINUED.

PAYMENTS.

Amounts brought forward, ...		$2,493.00	$129,830.65
From Gifts for Special Purposes (*continued*).			
For Department of Anthropology, ...		25.00	
" " Architecture, books, casts, etc.,		2,415.28	
" " Chemistry, books and improvements, ...		1.53	
" " The Classics, books, etc. . . .		333.51	
" " Economics.			
Books and material,	$113.08		
Maps and charts, .	107.77	220.85	
" " French, books, ...		.82	
" " Geology and Geography, lantern slides and models, ...		131.50	
" " German, books, ...		14.26	
" " Mining and Metallurgy, . . .		1,223.77	
" " Music, books, ...		51.70	
" **Harvard** Psychological Studies, publication,		1,629.48	
" **Lowell** Memorial Library, books, ...		14.04	
" Semitic Library, books, ...		243.34	
" Bermuda Biological Station, ...		1,509.29	
" furnishing the Common-Room in Conant Hall,		491.40	
" extra copies of contributions from the Zoölogical Laboratory, ...		66.40	
" School for Social Workers, . . .	$2,331.00		
Less charged to College salaries,	1,500.00	831.00	
" The Ethics of the Social Questions.			
Sundry expenses, ...		1,516.66	
For Furnishings for the Department of Social Ethics, in Emerson Hall, ...		133.87	
" Furnishing Emerson Hall, ...		3,096.21	
" Philosophical Library.			
Freight on books, ...		5.00	
" Improvements at the Engineering Camp at Squam Lake, N.H., ...		157.33	16,605.24
Payments made from College income on the following accounts:—			
Museum of Comparative Zoölogy (part, see Table XIII, page 123), ...		$4,227.00	
Jefferson Physical Laboratory (part, see Table XVIII, page 127), ...		665.96	
Hemenway Gymnasium (part, see Table XXI, page 130), ...		6,749.90	11,642.86
Summer Schools.			
Salaries, ...		$19,395.20	
Secretary, ...		900.00	
Amounts carried forward, ...		$20.295.20	$158,078.75

TABLE NO. II, THE COLLEGE, CONTINUED.

PAYMENTS.

Amounts brought forward, ...	$20,295.20	$158,078.75
Summer Schools (*continued*).		
Repairs and improvements, ...	17.73	
Care and cleaning, ...	129.37	
Fuel, ...	13.50	
Water, ...	17.44	
Lighting, ...	7.41	
Printing, ...	579.81	
Stationery and postage, ...	381.53	
Prospectus and Catalogue, ...	665.47	
Advertising, ...	433.47	
Diplomas, ...	21.00	
Services and wages, ...	820.15	
Remission of fees for instruction, ...	200.00	
Geological and Geographical courses, travelling expenses, ...	28.66	
Receptions, ...	256.20	
Use of swimming tank, ...	400.00	
Gymnasium expenses, ...	88.85	
Instruments and appliances, ...	7.87	
Deficit for dining-room, ...	9,849.61	
Supplies, materials, and sundries, ...	168.97	34,382.24
Appropriations for collections, laboratories, etc.		
Anthropology, ...	$100.00	
Architecture, ...	500.00	
Landscape Architecture, ...	1,300.00	
Botany, ...	580.00	
Chemistry, ...	250.00	
Classics, ...	400.00	
Economics, ...	675.00	
Education, ...	100.00	
Engineering, ...	2,000.00	
English, ...	200.00	
Fine Arts, ...	200.00	
French and Spanish, ...	1,300.00	
Geology and Geography, ...	338.54	
German, ...	925.00	
Graduate Schools, advertising, ...	2,100.00	
History, ...	750.00	
History, for books, ...	188.60	
Mineralogy and Petrography, ...	350.00	
Mining 12, ...	100.00	
Music, ...	125.00	
Physics, ...	500.00	
Psychology, ...	150.00	
Amounts carried forward, ...	$13,132.14	$192,460.99

TABLE NO. II, THE COLLEGE, CONTINUED.

PAYMENTS.

Amounts brought forward,	$13,132.14	$192,460.99
Appropriations for collections, laboratories, etc. (*continued*).		
Zoölogy,	200.00	
" for reprints,	50.00	
Assistants to Instructors,	521.00	
Laboratory fees appropriated,	28,036.34	41,939.48
Salaries.		
Instruction,	$523,572.76	
Deans,	6,333.33	
Chairmen of Committees,	400.00	
Recorders and Secretaries,	7,550.00	
Examination Proctors,	1,450.00	539,306.09
For College Public Buildings, which are not valued in the Treasurer's books.		
Repairs, improvements, &c.,	$4,654.13	
Care and cleaning,	13,704.60	
Fuel,	6,985.83	
Water,	308.28	
Lighting,	1,843.92	
Insurance,	680.37	
Electric power,	513.61	
Supplies and sundries,	337.87	
Telephones,	38.07	
Furniture,	960.21	30,026.89
For College Dormitories, Hollis, Stoughton, Holworthy, Thayer, Weld, Wadsworth House, Walter Hastings, Perkins, and Conant, which are not valued in the Treasurer's books.		
Perkins Hall.		
Installation of heating system,	$3,638.12	
Other changes,	811.77	
Conant Hall.		
Additions to heating system,	405.60	
Changes in plan,	2,619.57	
Furniture,	5.28	
Repairs and improvements,	8,219.72	
Care and cleaning,	16,427.61	
Fuel,	3,723.12	
Water,	1,427.79	
Lighting,	3,553.82	
Insurance,	930.50	
Supplies and sundries,	387.31	42,150.21
General Expenses.		
Deans and Chairmen of Committees, clerical and office expenses,	$17,836.60	
Amounts carried forward,	$17,836.60	$845,883.66

TABLE NO. II, THE COLLEGE, CONTINUED.

PAYMENTS.

Amounts brought forward,		$17,836.60	$845,883.66
General Expenses (*continued*).			
Secretary of the Faculty, clerical and office expenses.			
Alterations to office,	$505.10		
Furniture,	405.07		
Assistance,	75.00	985.17	
Reading examination books,		3,900.96	
Services of proctors,		1,471.40	
" undergraduates,		1,263.56	
" Head Guide in College grounds,		375.00	
" Librarian in Emerson Hall,		150.00	
Attendants in department laboratories,		2,023.75	
Admission examinations,		2,816.61	
Commencement Lunch,		250.33	
Printing office, expenses,	$27,695.14		
Less receipts from other Dep'ts,	16,392.41	11,302.78	
Annals of Mathematics,		1,039.41	
Syllabus in Geometry,		52.62	
Infinite Series,		26.65	
Harvard Economic Studies, Vol. II,		709.05	
Syllabus in History 1,		66.95	
Map of Europe,		106.09	
Telephones,		18.00	
Advertising,		982.45	
Watchmen,		1,460.00	
Legal expenses,		75.00	
Music, Class-Day,		125.00	
Receptions,		73.50	
Towards room of visiting German Professor,		45.00	
Landscape Architecture, pamphlet,		676.56	
Forestry, apparatus and supplies,		165.40	
Moving Psychological Laboratory,		......	
Services and expenses at Faculty meetings,		151.14	
" for Regent,		7.50	
Blank books for examinations,		942.10	
Expenses of Engineering Camp at Squam Lake,		11,945.92	
Engineering courses in Pierce Hall,		8,740.39	
Travelling expenses in Economics 18,		100.00	
College Entrance Examination Board,		131.30	
Expense of collecting term-bills,		147.04	
Diplomas,		849.14	
Committee on the Publication of Academic Distinctions,		43.00	
Lighting College Yard,		182.50	
Stereopticon operator,		9.00	
Freight, and sundries,		94.35	71,341.17
			$917,224.83

Table No. III.

THE LIBRARY.

RECEIPTS.

Gifts for Capital Account.			
Charles Eliot Norton Fund (additional),		$454.92	
William R. Castle Fund,		1,000.00	
Stephen Salisbury Bequest,		5,120.00	$6,574.92
Income of Book Funds, and Gifts and Receipts for the purchase of books.			
Nathaniel I. Bowditch,		$105.66	
Bright Legacy (½ income, see p. 85),		1,227.50	
Edwin Conant (¼ income, see p. 104),		339.90	
Constantius (½ income, see p. 104),		635.92	
Denny,		263.67	
Eliza Farrar,		264.94	
Price Greenleaf (part, see pp. 86, 88, 104),		1,000.00	
Horace A. Haven,		159.38	
Francis B. Hayes,		498.76	
George Hayward,		260.08	
Thomas Hollis,		119.51	
Sidney Homer,		104.49	
Jarvis,		25.88	
Frederick A. Lane,		266.66	
Lowell,		1,339.10	
Charles Minot,		2,960.58	
Charles Eliot Norton,		439.05	
Lucy Osgood,		355.48	
Mary Osgood,		345.03	
Henry L. Pierce,		2,465.65	
Francis Sales,		192.42	
Stephen Salisbury,		259.28	
Sever,		974.39	
Samuel Shapleigh,		196.99	
George B. Sohier (part, see p. 89),		93.70	
Subscription,		520.95	
Charles Sumner,		1,842.87	
Kenneth Matheson Taylor,		248.59	
Daniel Treadwell (½ income, see p. 104),		300.54	
Ichabod Tucker,		200.89	
Henry W. Wales (part, see p. 84),		200.02	
James Walker,		783.92	
Thomas W. Ward,		258.31	
J. Huntington Wolcott,		1,007.24	
Gifts for books. Gifts,	$10,112.68		
Interest,	70.79	10,183.47	
Sale of duplicate books,		10.50	
Received for books lost,		87.52	30,538.79
Amount carried forward,			$37,113.71

TABLE No. III, THE LIBRARY, CONTINUED.

RECEIPTS.

Amount brought forward,		$37,113.71
Income of **R. M. Hodges** Fund (part, see p. 86).		
For publishing bibliographical contributions,		377.24
Income of Funds for general purposes.		
Daniel Austin,	$382.32	
Class of 1880 (part, see pp. 83, 121),	1,000.00	
Edwin Conant (½ income, see p. 103),	1,019.68	
Constantius (½ income, see p. 103),	635.92	
Fund of the **Class of 1851,**	34.62	
" " " " (**C. F. Dunbar's** Gift),	34.08	
Price Greenleaf (part, see pp. 86, 88, 103),	16,265.66	
Henry T. Morgan,	4,023.79	
Henry L. Pierce (Residuary) (part, see pp. 79, 122),	2,455.00	
Stephen Salisbury Bequest,	73.31	
James Savage (part, see pp. 87, 121),	1,321.65	
Daniel Treadwell (½ income, see p. 103),	300.54	
Eben Wright,	4,910.00	32,456.57
Fees for use of Library,	$90.00	
Fines,	483.64	
Sale of Bibliographical Contributions,	3.43	
Gifts for additional service,	1,815.00	
Gift for special equipment,	50.00	2,442.07
		$72,389.59

PAYMENTS.

For Books, from the following Funds, Gifts, etc.	
Bowditch,	$75.95
Bright,	1,347.94
Edwin Conant,	266.57
Constantius,	621.84
Denny,	252.89
Farrar,	242.45
Price Greenleaf (part, see pp. 95, 97),	1,236.79
Haven,	120.65
Hayes,	578.43
Hayward,	159.75
Hollis,	93.81
Homer,	70.98
Jarvis,	37.83
Lane,	362.48
Lowell,	921.51
Minot,	2,682.99
Charles Eliot Norton,	626.88
Lucy Osgood,	374.10
Mary Osgood,	252.38
Amount carried forward,	$10,326.22

TABLE NO. III, THE LIBRARY, CONTINUED.

PAYMENTS.

Amount brought forward,		$10,326.22	
For Books, from the following Funds, Gifts, etc. (*contin'd*).			
Henry L. Pierce,		1,598.79	
Sales,		199.88	
Salisbury,		387.99	
Sever,		905.79	
Shapleigh,		210.45	
George B. Sohier (part, see p. 97),		174.22	
Subscription,		585.35	
Sumner,		1,861.77	
Kenneth Matheson Taylor,		143.81	
Daniel Treadwell,		419.48	
Tucker,		211.95	
Wales,		43.79	
Walker,		756.94	
Ward,		213.16	
J. Huntington Wolcott,		1,294.17	
Sundry gifts for books (balances),		10,537.70	
Duplicate money and receipts for lost books,		211.22	
Fines,		64.47	$30,147.15
Salaries,		$18,900.00	
Services and wages (part, see next line),		18,358.39	
Services paid from special gifts (part, see below),		1,400.00	
Repairs and improvements,		937.96	
Care and cleaning,		1,048.73	
Fuel,		1,123.45	
Water,		64.01	
Lighting,		1,203.32	
Printing,		647.03	
Furniture,		307.19	
Stationery and postage,		524.09	
Telephone,		105.00	
Binding,		3,090.77	
Electric power,		36.35	
Freight,		172.77	
Supplies and sundries,		1,039.46	
Moving books,		20.00	48,978.52
Department Libraries.			
Services and wages.			
Paid from special gifts,	$103.00		
Remainder,	1,122.75	$1,225.75	
Lighting paid from special gift,		13.00	1,238.75
			$80,364.42

TABLE No. IV.

DIVINITY SCHOOL.

RECEIPTS.

Income of Funds for Instruction, or for general purposes.			
Divinity School balance (interest on),		$312.47	
Endowment,		3,507.07	
Oliver Ames,		834.70	
Hannah C. Andrews,		25.78	
Daniel Austin,		54.75	
Adams Ayer,		49.10	
Joseph Baker,		750.00	
Beneficiary money returned (balance),		9.82	
Bussey Professorship,		1,845.37	
Bussey Trust (part, see pp. 108, 117, 131),		2,710.28	
Joshua Clapp,		106.94	
Edwin Conant,		245.50	
Dexter Lectureship,		1,254.21	
Frothingham Professorship,		2,661.37	
Abraham W. Fuller,		51.56	
Lewis Gould,		44.73	
John Hancock Professorship,	$294.99		
Charles L. Hancock (part, see p. 131),	3,776.84	4,071.83	
Haven,		245.50	
Samuel Hoar,		51.56	
Henry P. Kidder,		491.00	
Henry Lienow,		450.98	
Caroline Merriam,		51.56	
Parkman Professorship,		786.39	
John W. Quinby,		28.58	
Abby Crocker Richmond,		49.10	
John L. Russell,		49.10	
William B. Spooner,		491.00	
Thomas Tileston of New York Endowment,		1,964.00	
Mary P. Townsend,		257.77	
Winthrop Ward,		103.11	
Winn Professorship,		2,766.59	$26,321.72
Interest on account of tuition fees paid in advance,			26.49
Income of Scholarship, Beneficiary and Prize Funds.			
Robert Charles Billings, for prizes,		$125.35	
Abner W. Buttrick,		656.03	
Thomas Cary,		281.24	
George Chapman,		138.81	
Joshua Clapp,		224.14	
Jackson Foundation,		743.87	
J. Henry Kendall,		274.42	
Amounts carried forward,		$2,443.86	$26,348.21

TABLE NO. IV, DIVINITY SCHOOL, CONTINUED.

RECEIPTS.

Amounts brought forward, . . .		$2,443.86	$26,348.21
Income of Scholarship, etc. (*continued*).			
Nancy Kendall, ...		173.52	
William Pomroy, ...		51.56	2,668.94
Income of Book Funds.			
Rushton Dashwood Burr, ...		$224.58	
Louisa J. Hall, ...		42.13	266.71
Receipts from Students.			
Tuition fees, regular courses, ...		$5,500.00	
" " Summer School, ...		1,545.00	
Divinity Hall, ...		2,925.00	
Library fines, ...		7.45	9,977.45
Gift for Divinity Library, ...		$4.07	
Gift from Society for Promoting Theological Education,		1,447.00	
Honoraria returned, ...		75.00	
Sale of tickets to Alumni Dinner, ...		52.00	
" catalogues, ...		.75	
" duplicate books, ...		12.30	
Paid by the College for use of room in Divinity Hall for the visiting German Professor, ...		45.00	1,636.12
			$40,897.48

PAYMENTS.

From Scholarship Funds.			
Thomas Cary, ...		$240.00	
George Chapman, ...		100.00	
Joshua Clapp, ...		180.00	
Jackson Foundation, ...		640.00	
J. Henry Kendall, ...		200.00	
Nancy Kendall, ...		140.00	$1,500.00
From Beneficiary Funds.			
Abner W. Buttrick, ...		$575.00	
William Pomroy, ...		49.77	624.77
From **Robert Charles Billings** Fund, prize, ...			100.00
From Book Funds.			
Rushton Dashwood Burr, ...			257.97
Salaries for instruction, ...		$27,146.59	
Summer School. Salaries for instruction, .	$1,200.00		
Printing and other expenses,	364.26	1,564.26	
Secretary and Librarian, ...		1,750.00	
Services and wages, ...		259.77	
Library Assistants, ...		1,162.30	
Repairs, improvements, and labor, ...		707.96	
Insurance, ...		142.01	
Care and cleaning, ...		1,883.53	
Amounts carried forward, ...		$34,616.42	$2,482.74

TABLE NO. IV, DIVINITY SCHOOL, CONTINUED.

PAYMENTS.

Amounts brought forward,	$34,616.42	$2,482.74
Fuel,	498.98	
Water,	47.44	
Lighting,	235.36	
Printing,	220.00	
Furniture,	53.87	
Stationery and postage,	90.01	
Telephone,	20.00	
Books,	389.07	
Binding,	128.50	
Advertising,	355.32	
Diplomas,	11.00	
Alumni dinner,	60.00	
Proportion of expenses of Gymnasium (see Table XXI, page 130),	87.04	
American School for oriental study and research in Palestine (seventh payment),	100.00	
Subscriptions to the Fellowship in Christian Archaeology in the American School of Classical Studies in Rome,	25.00	
Supplies and sundries,	85.89	
From gift to complete a set of periodicals in the Library,	4.07	37,027.97
		$39,510.71

TABLE NO. V.

LAW SCHOOL.

RECEIPTS.

Gift for Capital Account.		
Samuel Phillips Prescott Fay 1798 Fund and Scholarship,		$5,000.00
Income of Funds and Gifts.		
Law School balance (interest on),	$10,292.15	
James Barr Ames Loan,	26.86	
James Barr Ames Prize,	103.94	
Gift of **James Munson Barnard** and **Augusta Barnard.** Interest on balance,	40.24	
Bemis Professorship,	3,839.72	
Bussey Professorship,	1,177.42	
Bussey Trust (part, see pp. 106, 117, 131),	2,710.28	
James C. Carter Professorship,	5,045.76	
James Coolidge Carter Loan,	591.51	
Dane Professorship,	773.32	
Samuel Phillips Prescott Fay 1798 Fund and Scholarship,	81.85	
Amounts carried forward,	$24,683.05	$5,000.00

Table No. V, Law School, continued.

RECEIPTS.

Amounts brought forward,		$24,683.05	$5,000.00
Income of Funds and Gifts (*continued*).			
George Fisher Scholarship,		175.04	
John Foster, for Medical Students and for Law Students in alternate years,		155.70	
Hughes Loan. Interest,	$37.12		
Repayments,	234.60	271.72	
Law School Book,		2,308.73	
Law School Library,		4,910.00	
Royall Professorship,		409.54	
Weld “		4,664.25	
Scholarship Money Returned. Interest,	$24.85		
Repayments,	219.00	243.85	
Interest on account of tuition fees paid in advance,		495.36	
Tuition fees,		102,880.00	
Sale of catalogues,		6.50	141,203.24
			$146,203.24

PAYMENTS.

(See also Construction Accounts, Table XXIV, p. 133.)

From Funds and Gifts.		
James Barr Ames Prize,	$410.00	
Gift of **James Munson Barnard** and **Augusta Barnard,** for books,	14.37	
Hughes Loan,	551.00	$975.37
Scholarships from unrestricted income,	$5,250.00	
Salaries for instruction,	53,475.00	
Librarians and Assistants,	11,136.91	
Secretary,	675.00	
Services of examiners and proctors,	343.50	
Repairs and improvements,	320.46	
Care and cleaning,	1,665.08	
Fuel,	679.04	
Water,	98.45	
Lighting,	1,416.21	
Printing,	2,839.73	
Furniture,	168.83	
Stationery and postage,	601.96	
Telephone,	77.50	
Books,	14,670.83	
Binding,	2,998.52	
Cleaning and moving books,	32.00	
Advertising,	125.00	
Insurance,	226.17	
Amounts carried forward,	$96,800.19	$975.37

TABLE NO. V, LAW SCHOOL, CONTINUED.

PAYMENTS.

Amounts brought forward,	$96,800.19	$975.87
Freight,	283.58	
Proportion of expenses of Gymnasium (see Table XXI, page 130),	1,667.36	
Travelling expenses,	308.45	
Electric power,	116.71	
Diplomas,	96.80	
Sundries,	378.84	99,651.93
		$100,627.80

TABLE NO. VI.

MEDICAL SCHOOL.

RECEIPTS.

(See also CONSTRUCTION ACCOUNTS, Table XXIV, page 132.)

Gifts for Capital.		
Harvard Medical Alumni Fund,	$2,430.00	
F. B. Greenough Fund (additional),	500.00	
John Homans Memorial Fund,	50,000.00	
Walter Augustus Lecompte Professorship of Otology Fund,	50,000.00	
Lyman Nichols Fund,	10,000.00	
Edward Wigglesworth Professorship of Dermatology Fund,	50,000.00	
James Skillen Memorial Fund,	10,857.39	
James Jackson Cabot Fund,	6,000.00	$179,787.39
Fund established.		
Henry Francis Sears Fund for Pathology established by vote of the Corporation, March 11, 1907, with part of the proceeds from the sale of the Medical School property at the corner of Boylston and Exeter Streets, by which the laboratory erected in 1889 with the gift of $35,000 from **Henry Francis Sears**, and known as the **Sears** Pathological Laboratory, passed from the possession of the University,		35,000.00
Income of Funds for Instruction, or for general purposes.		
Harvard Medical Alumni,	$79.54	
Anonymous Fund in the Department of Theory and Practice,	493.90	
Edward M. Barringer (part, see p. 111),	752.69	
Amounts carried forward,	$1,326.13	$214,787.39

TABLE NO. VI, MEDICAL SCHOOL, CONTINUED.

RECEIPTS.

Amounts brought forward, ...	$1,326.13	$214,787.39
Income of Funds for Instruction (*continued*).		
Robert C. Billings, ...	5,868.19	
John B. and **Buckminster Brown**, ...	1,101.71	
Bullard Professorship of Neuropathology, . . .	2,498.65	
Calvin and **Lucy Ellis** (part, see p. 131), . . .	17,495.17	
George Fabyan Foundation for Comparative Pathology (part, see p. 112), ...	6,478.18	
Samuel E. Fitz, ...	90.15	
Henry Harris (½ income, see p. 79), ...	735.00	
Hersey Professorship (⅖ income, see p. 83), . .	397.06	
George Higginson, ...	5,046.35	
John Homans Memorial, ...	1,738.97	
Henry Jackson Endowment, ...	4,719.88	
Jackson Professorship of Clinical Medicine, . .	3,397.38	
Walter Augustus Lecompte Professorship of Otology, ...	306.87	
William O. Moseley, ...	2,604.31	
New subscription, ...	1,902.60	
Lyman Nichols, ...	20.18	
Henry L. Pierce (Residuary), ...	20,960.50	
Dr. Ruppaner, ...	458.40	
Henry Francis Sears Fund for Pathology, . .	1,217.29	
George C. Shattuck, ...	3,629.44	
James Stillman Professorship, ...	5,661.18	
Mary W. Swett, ...	774.06	
Samuel W. Swett, ...	982.00	
Quincy Tufts, ...	98.20	
Edward Wigglesworth Professorship of Dermatology, ...	1,329.78	
Henry Willard Williams, ...	1,922.51	92,760.14
Interest on account of tuition fees paid in advance, ...		278.97
Income of Fellowship Funds; Gift for Fellowship.		
Anonymous Gift, ...	$600.00	
Edward Austin (part, see pp. 85², 88, 116).		
Austin Teaching Fellowships, ...	2,000.00	
George Cheyne Shattuck Memorial, ...	267.40	
Charles Eliot Ware "	285.42	
John Ware "	264.99	3,417.81
Income of Scholarship and Aid Funds.		
Anonymous Aid, ...	$254.19	
Edward M. Barringer (part, see p. 110), . .	500.00	
Lucius F. Billings, ...	257.82	
James Jackson Cabot, ...	245.50	
Amounts carried forward, ...	$1,257.51	$311,244.31

TABLE NO. VI, MEDICAL SCHOOL, CONTINUED.

RECEIPTS.

Amount brought forward, ...		$1,257.51	$311,244.81
Income of Scholarship and Aid Funds (*continued*).			
David Williams Cheever, ...		286.79	
Cotting Gift, ...		157.96	
Orlando W. Doe, ...		144.11	
Joseph Eveleth (part, see p. 86), ...		600.00	
Lewis and **Harriet Hayden**, ...		280.46	
William Hilton (part, see p. 86), ...		450.00	
Claudius M. Jones, ...		321.56	
Alfred Hosmer Linder, ...		270.74	
Joseph Pearson Oliver, ...		430.51	
Charles B. Porter, ...		282.91	
Charles Pratt Strong, ...		246.43	
Isaac Sweetser, ...		323.08	
John Thomson Taylor, ...		265.93	
Edward Wigglesworth, ...		271.82	5,589.81
Income of Prize Funds.			
Ward Nicholas Boylston, ...		$194.63	
William H. Thorndike, ...		385.09	579.72
Income of Sundry Funds and Gifts for special purposes.			
Edward Austin (Bacteriological Laboratory), .		$568.28	
J. Ingersoll Bowditch, ...		306.48	
Boylston, for Medical Books, ...		72.57	
Caroline Brewer Croft (part, see p. 131), . .		2,419.29	
George Fabyan Foundation for Comparative Pathology, interest (part, see p. 111),	$3,627.78		
Returned from appropriation, . . .	80.00	3,707.78	
F. B. Greenough (surgical research), ...		201.16	
Medical Library, ...		99.48	
Proctor, for the study of Chronic Diseases.			
Interest, ...	$2,761.63		
Returned from appropriation, . . .	456.95	3,218.58	
School of Comparative Medicine, ...		262.29	
Surgical Laboratory, ...		338.25	
Warren Fund for Anatomical Museum.			
Interest, ...	$670.27		
Insurance premiums returned, ...	35.28	705.55	
Gifts for present use, ...		163.01	12,062.72
Sale of malene by the Department of Pathology, . . .		$92.00	
Gifts for present use, ...		16,300.32	
For heat and power supplied to the House of the Good Samaritan, ...		2,347.22	
From instructors for advertising summer courses, . . .		360.00	19,099.54
Amount carried forward, ...			$348,576.10

TABLE NO. VI, MEDICAL SCHOOL, CONTINUED.

RECEIPTS.

Amount brought forward,			$348,576.10
Receipts from students.			
Tuition fees, regular courses,	$55,798.07		
" " graduate courses,	2,141.00		
" " Dental students,	3,075.00		
" " summer courses,	7,698.05	$68,712.12	
Graduation fees,		300.00	
Matriculation fees,		460.00	
Examination fees,		96.00	
Laboratory fees and supplies.			
Anatomy,	$1,563.10		
Chemistry,	932.25		
Pathological Technique,	105.08		
Physiology,	374.52		
Operative Surgery,	195.00		
Surgical Technique,	186.00	3,355.95	72,924.07
Repayments.			
Appropriations (balances),		$517.60	
Expenses for a personal object,		50.00	567.60
			$422,067.77

PAYMENTS.

(See also CONSTRUCTION ACCOUNTS, Table XXIV, page 133.)

From Fellowship Funds and Gift.		
Anonymous Gift,	$600.00	
Edward Austin (part, see pp. 94^2, 97, 116).		
Austin Teaching Fellowship,	2,000.00	
George Cheyne Shattuck Memorial,	225.00	
Charles Eliot Ware Memorial,	225.00	
John Ware Memorial,	225.00	$3,275.00
From Scholarship and Aid Funds.		
Anonymous Aid,	$200.00	
Edward M. Barringer (part),	500.00	
Lucius F. Billings,	200.00	
David Williams Cheever,	250.00	
Cotting Gift,	125.00	
Orlando W. Doe,	140.00	
Joseph Eveleth (part, see p. 95),	600.00	
John Foster,	100.00	
Lewis and **Harriet Hayden**,	272.50	
William Hilton (part),	450.00	
Claudius M. Jones,	250.00	
Alfred Hosmer Linder,	200.00	
Amounts carried forward,	$3,287.50	$3,275.00

TABLE NO. VI, MEDICAL SCHOOL, CONTINUED.

PAYMENTS.

Amounts brought forward,		$3,287.50	$3,275.00
For Scholarship and Aid Funds (*continued*).			
Joseph Pearson Oliver,		325.00	
Charles B. Porter,		225.00	
Charles Pratt Strong,		100.00	
Isaac Sweetser,		250.00	
John Thomson Taylor,		200.00	
Edward Wigglesworth,		200.00	4,587.50
From Prize Fund.			
Boylston, advertising,			12.50
From Sundry Funds and Gifts for special purposes.			
Edward Austin (Bacteriological Laboratory),		$667.88	
Robert C. Billings, Journal of Medical Research,		800.00	
J. Ingersoll Bowditch, Physiology,		114.89	
Boylston, Medical Books,		17.46	
Bullard Professorship of Neuropathology,		1,235.60	
Caroline Brewer Croft (part), cancer investigations,		929.05	
George Fabyan Foundation for Comparative Pathology (part), services,		3,627.78	
Gifts for Anatomical Research,		202.37	
Gifts for Pathological Department Library,		404.93	
Proctor, for the study of Chronic Diseases,		3,185.15	
Surgical Laboratory,		1,431.03	
Warren Fund for Anatomical Museum,		1,965.12	
Sundry Gifts (balances),	$8,752.29		
Less paid for salaries,	4,750.00	4,002.29	18,583.55
Appropriations.			
Anatomy,		$1,980.00	
Comparative Anatomy,		1,527.10	
Bacteriology,		600.00	
Books and service for the library,		3,500.00	
Chemistry,		1,232.25	
Histology and Embryology,		750.00	
Hygiene,		700.00	
Boston Medical Library, for use of,		100.00	
Clinical Medicine,		50.00	
Obstetrics,		50.00	
Pathology,		1,200.00	
Pharmacology and Therapeutics,		700.00	
Physiology,		2,594.52	
Comparative Physiology,		500.00	
Surgery,		586.00	
Theory and Practice,		700.00	16,769.87
Amount carried forward,			$43,228.42

Table No. VI, Medical School, continued.

PAYMENTS.

Amount brought forward,		$43,228.42
Graduate courses, fees repaid to Instructors,	$2,141.00	
Summer " " " "	8,793.00	10,934.00
Salaries for instruction,		91,691.66
Retiring allowance,		1,000.00
General Expenses.		
Dean and Secretary,	$500.00	
Clerical services,	1,370.13	
Repairs and improvements,	1,210.07	
Care and cleaning, in new buildings,	14,619.85	
" " old " (part of year),	590.70	
Fuel,	11,586.58	
Water, in new buildings,	722.57	
" old " (part of year),	403.20	
Lighting and gas, in new buildings,	275.82	
" " old " (part of year),	306.40	
Printing,	717.53	
Furniture,	18.01	
Stationery and postage,	393.14	
Telephones, in new buildings,	1,240.28	
" old " (part of year),	106.32	
Advertising and catalogues,	1,491.59	
Insurance,	25.00	
Proctors,	67.00	
Mechanics and laboratory attendants,	9,496.41	
Watchman,	1,415.54	
Diplomas,	105.89	
Moving to new buildings,	4,503.40	
Dedication of new buildings,	278.55	
Repairing portraits,	132.50	
Washing towels,	701.49	
Supplies and material,	1,690.22	
Sundries,	181.03	
Interest on advances,	277.67	54,426.89
		$201,280.97

Table No. VII.

DENTAL SCHOOL.

RECEIPTS.

Income of Funds and Gifts.			
Edward Austin (part, see pp. 85², 88, 111).			
Austin Teaching Fellowship, ...		$500.00	
Dental School balance (interest on), ...		636.14	
Dental School Endowment, ...		111.36	
Henry C. Warren Endowment, ...		1,129.30	
Gifts for building and for endowment.			
Harvard Dental Alumni Gifts, .	$1,430.50		
Other Gifts, ...	3,009.00		
Interest, ...	852.42	5,291.92	$7,668.72
Interest on tuition fees paid in advance, ...			51.06
Receipts from students.			
Tuition fees, regular courses, ...	$10,640.00		
" " special "	300.00		
" " summer "	437.50		
	$11,377.50		
Less transferred to Medical School,	3,075.00	$8,302.50	
Examination fees, ...		27.00	
Laboratory fees, ...		3,505.72	
Use of microscopes, ...		51.00	
Chemistry, breakage and supplies, ...		267.32	12,153.54
Fees from infirmary, ...			4,809.25
Sale of gold, platinum, and sweepings, ...		$401.02	
" scraps and old materials, ...		61.94	462.96
Receipts from real estate.			681.17
			$25,826.70

PAYMENTS.

Edward Austin (part, see pp. 94², 97, 113).		
Austin Teaching Fellowship, ...		$500.00
Real Estate. Expenses, ...		522.41
Salaries for instruction, ...	$5,437.50	
Secretary, ...	700.00	
Proctors, ...	32.00	
Repairs and improvements, ...	1,008.62	
Care and cleaning, ...	1,147.58	
Fuel, ...	394.40	
Water, ...	114.30	
Lighting, ...	363.27	
Printing, ...	210.60	
Furniture, ...	76.30	
Instruments and apparatus, ...	77.13	
Amounts carried forward, ...	$9,561.70	$1,022.41

TABLE No. VII, DENTAL SCHOOL, CONTINUED.

PAYMENTS.

Amounts brought forward, ...	$9,561.70	$1,022.41
Stationery and postage, ...	316.89	
Telephone, ...	121.37	
Advertising, ...	477.22	
Services and wages, ...	2,064.61	
Services of an assistant in Chemistry, ...	65.00	
Annual Catalogue, ...	132.45	
Expenses in preparing for a new building, ...	25.00	
Hospitality, ...	110.00	
Laboratory expenses, ...	77.44	
Clinical expenses, ...	28.50	
Washing towels, ...	345.81	
Supplies, &c., ...	4,691.48	
Sundries, ...	98.58	18,116.05
		$19,138.46

TABLE No. VIII.

BUSSEY INSTITUTION.

RECEIPTS.

Income of Funds.		
Bussey Institution balance (interest on), ...	$1,415.36	
Bussey Trust (part, see pp. 106, 108, 131), . . .	5,420.55	$6,835.91
Tuition fees, ...		4,875.00
Interest on tuition fees paid in advance, ...		21.06
Sale of wood, hay and sundries, ...	$104.42	
Horticultural Department, prizes, sale of flowers, plants, &c.,	1,757.51	
Board of animals, ...	5,491.26	
Use of houses by College officers, ...	1,335.00	8,688.19
		$20,420.16

PAYMENTS.

Salaries, ...	$8,400.00
Services and wages, ...	3,468.07
Repairs and improvements, ...	1,238.87
Fuel, ...	386.25
Lighting, ...	3.04
Water, ...	38.20
Printing, ...	36.50
Stationery and postage, ...	12.52
Books, ...	62.76
Catalogue, ...	12.80
Advertising, ...	71.52
Horticultural Department, expenses, ...	2,202.78
Grain, farming tools, &c., ...	2,448.48
Amount carried forward, ...	$18,381.79

TABLE No. VIII, BUSSEY INSTITUTION, CONTINUED.

PAYMENTS.

Amount brought forward,	$18,381.79	
Diplomas,	4.25	
Furniture,	55.78	
Insurance,	58.75	
Sundries,	15.00	$18,515.57

TABLE No. IX.

ARNOLD ARBORETUM.

RECEIPTS.

Gift for capital account.			
Arnold Arboretum Fund (additional),			$745.00
Income of Funds and of Gifts.			
Arnold Arboretum balance (interest on),		$6,191.71	
James Arnold,		7,898.57	
Robert Charles Billings (part),		667.35	
William L. Bradley.			
Income,	$1,128.91		
Gift,	600.00	1,728.91	
Francis Skinner,		982.00	
Bussey, for the **Arnold** Arboretum,		113.32	
Gifts for construction (interest on balance),		592.91	
Gift for books (interest on balance),		6.51	18,181.28
Gifts for botanical exploration in Western China.			
Gifts,		$17,680.42	
Interest,		89.32	17,769.74
Gift for books,		$2,500.00	
Gifts for other present uses,		2,625.00	
" real estate and construction,		300.00	
Use of barn,		120.00	
Sale of grass and materials,		1,834.25	7,379.25
			$44,075.27

PAYMENTS.

From **William L. Bradley** Fund, bibliography,		$1,736.82
Botanical exploration in Western China, from gifts,		6,702.95
Books from gifts,		48.80
Salaries of Director and Assistants,	$4,950.00	
Repairs and improvements,	543.69	
Labor,	10,116.87	
Fuel,	409.42	
Water,	61.00	
Furniture,	477.36	
Amounts carried forward,	$16,558.34	$8,488.57

TABLE No. IX, ARNOLD ARBORETUM, CONTINUED.

PAYMENTS.

Amounts brought forward,	$16,558.34	$8,488.57
Stationery and postage,	329.07	
Printing,	1.90	
Services and wages,	6,214.50	
Supplies, tools, and materials,	1,335.65	
Taxes,	318.00	
Freight,	237.00	
Expenses of expeditions for collecting,	315.67	
Sundries,	5.15	25,315.28
		$33,803.85

TABLE No. X.

BOTANIC GARDEN AND BOTANICAL MUSEUM.

RECEIPTS.

Gift for Capital Account.		
Centennial Fund,		$850.00
Income of Funds.		
Botanic Department (⅘ income, see p. 90),	$1,220.75	
Centennial Fund,	10.21	
Lowell, for a Botanic Garden,	3,260.59	
John L. Russell (¼ income, see p. 120),	24.55	4,516.10
Gifts.		
For cases. Interest,	$15.88	
For sugar-cane investigations. Interest,	24.92	
For immediate use,	5,177.90	5,218.70
Laboratory fees in Botany 1, less expenses,		374.63
Sale of botanical material,		500.00
Use of house,		700.00
		$12,159.43

PAYMENTS.

From gift for cases,		$497.13
" for sugar-cane investigations,		531.35
Services and wages,	$655.22	
Labor,	4,911.50	
Repairs and improvements,	338.96	
Fuel,	773.06	
Water,	134.55	
Furniture,	23.95	
Stationery and postage,	4.50	
Telephone,	38.45	
Printing,	4.45	
Binding,	8.65	
Amounts carried forward,	$6,893.29	$1,028.48

Table No. X, Botanic Garden and Botanical Museum, continued.

PAYMENTS.

Amounts brought forward, ...	$6,893.29	$1,028.48
Taxes, ...	167.40	
Electric power, ...	.57	
Interest on advances, ...	449.54	
Supplies and sundries, ...	790.22	
Freight, ...	79.14	
Expenses of collecting plants, ...	15.25	
Ware Collection of glass models of flowers, expenses, .	242.30	
Cases bought with general income, ...	992.53	9,630.24
		$10,658.72

Table No. XI.

GRAY HERBARIUM.

RECEIPTS.

Gift for Capital Account.		
Sarah E. Potter Endowment Fund, ...		$50,165.00
Income of Funds.		
Gray Herbarium balance (interest on), ...	$85.19	
Robert Charles Billings, ...	736.50	
Asa Gray Memorial, ...	1,601.20	
Herbarium, ...	1,014.21	
Sarah E. Potter Endowment, ...	204.55	
John L. Russell (¼ income, see p. 119), . . .	73.65	3,715.30
Asa Gray's copyrights, ...		814.29
Gifts for immediate use, ...		3,223.44
Sale of publications, ...	$40.72	
" contributions, ...	6.60	
" card index, ...	2,220.12	
" duplicate book, ...	12.00	2,279.44
		$60,197.47

PAYMENTS.

Salaries, ...	$4,450.00	
Services and wages, ...	3,270.56	
Care and cleaning, ...	191.72	
Repairs and improvements, ...	18.58	
Furniture, ...	50.00	
Stationery and postage, ...	84.80	
Telephone, ...	45.52	
Printing, ...	575.58	
Books, ...	1,371.77	
Binding, ...	124.65	
Advertising, ...	4.00	
Supplies and sundries, ...	1,301.52	$11,488.70

TABLE No. XII.

OBSERVATORY.

RECEIPTS.

Income of Funds and Gift.		
Advancement of Astronomical Science (1902).		
Interest (part, see p. 131),	$775.57	
Thomas G. Appleton,	245.50	
J. Ingersoll Bowditch,	122.75	
Uriah A. Boyden,	9,538.36	
Class of 1880 (part, see pp. 83, 104),	500.00	
Charlotte Harris,	98.20	
Haven,	2,209.50	
James Hayward,	1,031.10	
Observatory Endowment,	2,455.00	
Paine Professorship,	2,455.00	
Robert Treat Paine,	13,450.06	
Edward B. Phillips,	5,415.43	
Josiah Quincy,	726.43	
James Savage (½ net income, see pp. 87, 104),	440.55	
David Sears,	1,970.78	
Augustus Story,	656.96	$42,091.19
Anonymous gift for special use,	$2,500.00	
Interest,	86.96	2,586.96
Mrs. Henry Draper, gift for special research (additional),	$10,000.00	
Interest,	111.60	10,111.60
Gifts for present use,		10,000.00
Use of house by College officer,	$600.00	
Sale of Annals,	41.09	
" photographs,	13.50	
" slides,	15.50	
" grass,	20.00	690.09
Award of insurance for loss by fire,		112.00
		$65,591.84

PAYMENTS.

From Advancement of Astronomical Science Fund (1902) (part, see p. 131),		$300.00
" **Uriah A. Boyden** Fund, supplies, apparatus, services, &c.,		12,833.45
" **Draper** Memorial, supplies, apparatus, services, &c.,	$10,827.44	
Less amount included in salaries,	3,000.00	7,827.44
Salaries,	$18,000.00	
Services and wages,	7,774.32	
Repairs and improvements,	2,261.42	
Care and cleaning,	573.63	
Labor,	1,510.88	
Amounts carried forward,	$30,120.25	$20,960.89

TABLE NO. XII, OBSERVATORY, CONTINUED.

PAYMENTS.

Amounts brought forward,	$30,120.25	$20,960.89
Fuel,	428.87	
Water,	69.03	
Lighting,	190.44	
Printing,	3,218.32	
Furniture,	179.10	
Instruments and apparatus,	2,301.76	
Stationery, postage, and telegraphing,	722.64	
Telephone,	84.33	
Books,	427.82	
Binding,	425.59	
Insurance,	67.04	
Freight,	275.82	
Use of house,	90.00	
Electric power,	96.09	
Interest on advances,	273.33	
Supplies and materials,	909.24	
Sundries,	45.90	39,925.57
		$60,886.46

TABLE NO. XIII.

MUSEUM OF COMPARATIVE ZOÖLOGY.

RECEIPTS.

Income of Funds.		
Museum of Comparative Zoölogy balance (int. on),	$1,753.61	
Agassiz Memorial,	14,628.51	
Teachers and Pupils,	372.87	
Virginia Barret Gibbs Scholarship,	273.39	
Gray Fund for Zoölogical Museum,	2,455.00	
Sturgis Hooper,	5,292.64	
Humboldt,	380.08	
Willard Peele Hunnewell,	245.50	
Permanent Fund for Museum of Zoölogy,	5,767.73	
Henry L. Pierce (Residuary), (part, see pp. 79, 104),	4,910.00	$36,079.33
Use of lecture rooms by Radcliffe College,		700.00
		$36,779.33

PAYMENTS.

From **Sturgis Hooper** Fund.		
Salary of **Sturgis Hooper** Professor,	$5,000.00	
Expenses,	140.00	$5,140.00
Salaries,	$11,100.00	
Services and wages,	3,907.80	
Repairs and improvements,	1,455.55	
Care and cleaning,	3,430.60	
Amounts carried forward,	$19,893.95	$5,140.00

TABLE No. XIII, MUSEUM OF COMPARATIVE ZOÖLOGY, CONTINUED.

PAYMENTS.

Amounts brought forward,		$19,893.95	$5,140.00
Fuel,		2,711.64	
Water,		60.96	
Gas,		9.27	
Printing,		1,982.89	
Cases,		6,061.09	
Stationery and postage,		77.90	
Telephone,		40.00	
Books,		1,699.92	
Binding,		606.62	
Watchmen,		949.45	
Collections,		3,149.33	
Freight,		329.80	
Travelling expenses,		163.00	
Supplies and sundries,		1,344.87	
		$39,080.69	
Less the following items which were paid from College income (see Table II, page 99): —			
Heating and service,	$3,437.00		
Librarian's salary (part),	250.00		
Watchman (part),	240.00		
Publishing contributions from the Laboratories of Geography and Zoölogy,	300.00	4,227.00	34,853.69
			$39,993.69

TABLE No. XIV.

PEABODY MUSEUM OF AMERICAN ARCHAEOLOGY AND ETHNOLOGY.

RECEIPTS.

Income of Funds.			
Hemenway Fellowship,		$614.19	
Peabody Building,		1,449.31	
Peabody Collection,		2,419.33	
Peabody Professor,		2,419,33	
Thaw Fellowship,		1,172.66	
Henry C. Warren Exploration,		511.28	
Susan Cornelia Warren,		245.50	
Robert C. Winthrop Scholarship,		284.88	
Huntington Frothingham Wolcott,		1,017.65	$10,134.13
Use of heating plant,			75.00
Gifts.			
For South American expedition. Gifts,	$5,299.92		
Interest,	31.23	$5,331.15	
For other present uses,		1,110.00	6,441.15
Library fines and for lost books,			1.60
Total of receipts, carried forward,			$16,651.88

Table No. XIV, Peabody Museum, continued.

Total of receipts, brought forward, ...		$16,651.88

PAYMENTS.

From **Henry C. Warren** Fund, explorations, ...		$506.00
" **Huntington Frothingham Wolcott** Fund, specimens,		831.07
" Gifts for South American Expedition, ...		5,639.10
Hemenway Fellowship, ...		200.00
Thaw Fellowship, ...		1,164.47
Robert C. Winthrop Scholarship, ...		225.00
Salary of Professor and Curator, ...	$2,371.54	
Services and wages, ...	3,352.80	
Repairs and improvements, ...	160.66	
*Care and cleaning, ...	1,150.90	
*Fuel, ...	187.20	
Water, ...	3.60	
*Lighting, ...	12.85	
Printing, ...	697.87	
Furniture, ...	450.24	
Stationery and postage, ...	239.29	
Telephone, ...	31.00	
Books, ...	84.24	
Binding, ...	10.90	
Explorations, ...	470.00	
Freight, ...	197.81	
Supplies, ...	134.33	
Sundries, ...	29.13	
Interest on advances, ...	95.30	
	$9,679.66	
Less the items marked *, which were paid from University income (see Table I, page 81), ...	1,350.95	8,328.71
		$16,894.35

Table No. XV.

SEMITIC MUSEUM.

RECEIPTS.

Gifts for Semitic Collection.		
Gifts, ...	$10,000.00	
Interest, ...	637.90	$10,637.90
Gift for excavations in Palestine. Interest, ...		40.63
		$10,678.53

PAYMENTS.

From gift for excavations in Palestine, ...	$2,575.00	
From gifts for Semitic Collection, ...	4,618.29	$7,193.29
Amount carried forward, ...		$7,193.29

TABLE NO. XV, SEMITIC MUSEUM, CONTINUED.

PAYMENTS.

Amount brought forward,		$7,193.29
General expenses.		
Curator,	$500.00	
Repairs and improvements,	25.42	
Care and cleaning,	624.19	
Fuel,	163.95	
Water,	17.96	
Lighting,	4.90	
Furniture,	39.77	
Electric power,	40.41	
Stationery and postage,	7.20	
Supplies and sundries,	1.20	
Use of Peabody Museum heating plant,	75.00	
These general expenses were paid from University income (see Table I, page 81),	$1,500.00	
		$7,193.29

TABLE NO. XVI.

GERMANIC MUSEUM.

RECEIPTS.

Gifts for Capital Account.		
Emperor William Fund (additional),		$6,970.00
Income of Funds and Gifts.		
Emperor William,	$1,133.52	
Unrestricted gift. Interest,	5.22	1,138.74
		$8,108.74

PAYMENTS.

From unrestricted gift,		$101.40
General expenses.		
Repairs and improvements,	$200.42	
Care and cleaning,	382.04	
Fuel,	97.27	
Water,	5.00	
Lighting,	54.88	
Insurance,	9.97	
Electric power,	50.93	
Sunday and Thursday opening of Museum,	190.26	
Hand-book,	203.89	
Supplies and sundries,	14.18	
	$1,208.84	
Less the amount which was paid from University income (see Table I, page 81),	75.32	1,133.52
		$1,234.92

TABLE No. XVII.

WILLIAM HAYES FOGG ART MUSEUM.

RECEIPTS.

Income of Funds.		
William Hayes Fogg,	$2,455.00	
Gray Fund for Engravings,	813.78	
William M. Prichard,	875.55	
John Witt Randall,	1,699.89	
Mary R. Searle,	96.38	
Sale of photographs and catalogue,	25.30	
For work in connection with photographs sold,	102.13	$6,068.03
Gift for the purchase of drawings by Turner,		1,000.00
		$7,068.03

PAYMENTS.

From gift, seventeen drawings by Turner,		$1,000.00
From the following Funds: —		
Gray Fund for Engravings.		
Curator,	$250.00	
Collections,	356.10	
Expenses,	146.94	753.04
William M. Prichard, collections,		348.83
John Witt Randall.		
Curator,	$250.00	
Collections,	36.42	
Expenses,	853.06	1,139.48
Mary R. Searle, books,		86.96
William Hayes Fogg Fund and Art Museum balance.		
Director,	$500.00	
Services and wages,	1,521.66	
*Care and cleaning,	1,589.90	
Repairs and improvements,	124.87	
*Fuel,	1,105.42	
*Water,	61.72	
*Lighting,	125.27	
Furniture,	183.62	
Printing,	9.00	
*Telephone,	18.00	
Work on collections,	9.40	
*Electric power,	26.77	
Interest on advances,	4.68	
Supplies and sundries,	29.65	
	$5,309.96	
Less the items marked *, which were paid from University income (see Table I, page 81),	2,927.08	2,382.88
		$5,711.19

Table No. XVIII.

JEFFERSON PHYSICAL LABORATORY.

RECEIPTS.

Income of Funds.			
Jefferson Physical Laboratory balance (interest on),		$95.01	
Physical Laboratory Endowment,		3,682.50	
Joseph Lovering.			
Income,	$393.93		
Gift,	100.00	493.93	$4,271.44
T. Jefferson Coolidge, for Research in Physics.			
Loans to be used in place of income.			
Loan,		$4,250.00	
Interest,		69.33	4,319.33
Anonymous Gift for Physical Research.			
Gift,		$1,381.95	
Interest,		12.12	1,394.07
			$9,984.84

PAYMENTS.

Research in Physics, from			
T. Jefferson Coolidge Fund,		$3,203.19	
Joseph Lovering Fund,		167.58	$3,370.77
Loan repaid, with interest, from			
T. Jefferson Coolidge Fund,			1,381.95
Instruments and apparatus,		$452.32	
Printing,		4.25	
Binding,		266.13	
Repairs,		65.96	
Care and cleaning,		1,036.04	
Fuel,		415.00	
Water,		35.84	
Lighting,		270.60	
Telephone,		61.00	
Stationery and postage,		89.91	
Insurance,		132.45	
Services and wages,		1,348.00	
Electric power,		296.49	
Furniture,		24.00	
Supplies and sundries,		13.25	
		$4,511.24	
Less the following, paid from College income (see Table II, page 99):—			
Repairs,	$65.96		
Fuel, services, etc.,	600.00	665.96	3,845.28
			$8,598.00

TABLE NO. XIX.

APPLETON CHAPEL.

RECEIPTS.

Income of Funds.		
Fund for Religious Services,	$50.77	
Increase Sumner Wheeler,	2,455.00	$2,505.77

PAYMENTS.

Preaching and morning services,	$3,218.80	
Administrator,	200.00	
Organist and Choir-master,	2,000.00	
Choir,	1,600.00	
Repairs and improvements,	112.80	
Care and cleaning,	364.84	
Fuel,	395.45	
Water,	2.58	
Lighting,	263.60	
Furniture,	135.53	
Music,	336.32	
Binding,	38.61	
Electric power,	30.27	
Repairing and tuning organ,	129.98	
Sundries,	38.21	
	$8,866.99	
Less the amount which was paid from University income (see Table I, page 81),	6,361.22	$2,505.77

TABLE NO. XX.

PHILLIPS BROOKS HOUSE.

RECEIPTS.

Income of Funds.		
Phillips Brooks House Endowment,	$515.90	
John W. and **Belinda L. Randall,**	283.65	
Ralph H. Shepard,	556.98	
Ralph Hamilton Shepard Memorial,	338.25	
Gift for present use,	25.00	$1,719.78

PAYMENTS.

From **John W.** and **Belinda L. Randall** Fund.		
Social Service Committee,		$100.00
Secretary of **Phillips Brooks** House Association,	$600.00	
Repairs,	57.69	
Care and cleaning,	1,154.77	
Fuel,	444.56	
Water,	50.73	
Lighting,	119.88	
Amounts carried forward,	$2,427.63	$100.00

TABLE No. XX, PHILLIPS BROOKS HOUSE, CONTINUED.

PAYMENTS.

Amounts brought forward,		$2,427.63	$100.00
Furniture,		13.32	
Books,		17.88	
Insurance,		71.81	
Receptions,		474.34	
Publications,		200.00	
Printing annual report,		90.25	
Rent of piano,		40.00	
Repairing desk of Phillips Brooks,		58.42	
Social Service Investigation,		200.00	
Supplies and sundries,		150.90	
		$3,744.55	
Less the following items, which were paid from University income (see Table I, page 81): —			
Repairs and improvements,	$57.69		
Care and cleaning,	1,054.77		
Fuel,	444.56		
Furniture,	13.32		
Water,	50.73		
Lighting,	119.88		
Insurance,	71.81		
Supplies and sundries,	44.26	1,857.02	1,887.53
			$1,987.53

TABLE No. XXI.

HEMENWAY GYMNASIUM.

RECEIPTS.

Fees for the use of		
Lockers, by students,	$2,418.00	
Gymnasium, by graduates,	20.00	
Gymnasium, by members of the Episcopal Theological School,	78.38	$2,516.38

PAYMENTS.

Salaries,	$5,000.00
Services and wages,	976.01
Repairs and improvements,	238.20
Care and cleaning,	2,516.99
Fuel,	757.61
Apparatus,	350.00
Insurance,	179.52
Water,	221.45
Lighting,	553.15
Photographs,	50.00
Amount carried forward,	$10,842.93

TABLE NO. XXI, HEMENWAY GYMNASIUM, CONTINUED.

RECEIPTS.

Amount brought forward,		$10,842.93	
Printing,		71.87	
Stationery and postage,		33.77	
Telephone,		40.00	
Supplies and sundries,		32.11	
		$11,020.68	
Less the following items: —			
Charged to Divinity School (see Table IV, page 108),	$87.04		
Charged to Law School (see Table V, page 110),	1,667.36		
Charged to The College (see Table II, page 99),	6,749.90	8,504.30	$2,516.38

TABLE NO. XXII.

STILLMAN INFIRMARY.

RECEIPTS.

Income of Funds and of Gifts.		
Stillman Infirmary balance (interest on),	$53.86	
Robert Charles Billings, for **Stillman** Infirmary,	2,697.90	
Free Bed Fund of the **Class of 1868,**	287.53	
" " for the **Stillman** Infirmary,	29.12	
Herbert Schurz Memorial Free Bed Fund,	161.88	
Stillman Infirmary Gift. Interest on balance,	315.71	
Henry P. Walcott,	142.73	
Samuel Ward,	834.80	$4,523.53
Receipts from Students.		
Infirmary annual fees,	$14,308.00	
Receipts from patients,	4,682.52	18,990.52
		$23,514.05

PAYMENTS.

Services and wages,	$5,440.81	
Janitors and cleaning,	3,182.19	
Repairs and improvements,	391.60	
Fuel,	2,111.30	
Water,	254.76	
Lighting,	493.81	
Furniture,	214.25	
Stationery and postage,	35.45	
Telephone,	174.96	
Printing,	9.90	
Electric power,	9.61	
Food and supplies,	6,250.46	
Sundries,	113.98	$18,683.08

TABLE No. XXIII.

SUNDRY FUNDS FOR SPECIAL PURPOSES.

RECEIPTS.

Gift for Capital Account.	
George Smith Bequest (additional),	$1,981.02
Income of Funds, Gifts, &c.	
Advancement of Astronomical Science (1901),	2,455.00
" " " " (1902) (part, see p. 121),	775.56
Bussey Trust (part, see pp. 106, 108, 117),	4,000.00
Class of 1834,	63.67
Class of 1844,	366.16
" **1846,**	559.10
" **1853,**	149.00
" **1856,**	385.68
Caroline Brewer Croft (part, see p. 112),	2,180.99
Calvin and **Lucy Ellis** (part, see p. 111),	125.24
George H. Emerson Scholarship (part, see p. 86),	84.35
Gospel Church (½ income, see p. 83),	170.65
Gurney (part, see p. 83),	1,000.00
Charles L. Hancock (part, see p. 106),	33.32
Harvard Memorial Society,	71.34
Henry S. Nourse (part, see p. 79),	1,020.00
Robert Troup Paine (accumulating),	1,667.62
Professorship of Hygiene (part, see p. 84),	3,666.82
James Skillen Memorial,	278.25
George Smith Bequest (part, see p. 132),	900.00
Alexander W. Thayer (part, see p. 89),	480.00
Charles Wilder,	1,964.00
Daniel Williams,	818.30
Sarah Winslow,	235.34
Woodland Hill. Use of laboratory,	1,000.00
	$26,431.41

PAYMENTS.

From the following Funds and Gifts.	
Advancement of Astronomical Science (1901), annuity,	$2,370.00
" " " " (1902) (part), annuity,	648.66
Bussey Trust (part), annuities,	4,000.00
Class of 1853, Secretary of the Class,	149.00
" **1856,** " " "	355.50
Caroline Brewer Croft (part), annuity,	2,180.99
Calvin and **Lucy Ellis** (part), taxes and expenses,	125.24
George H. Emerson Scholarship (part, see p. 95), taxes,	84.35
Gifts for Cuban Teachers, expenses,	52.00
Gurney (part), annuities,	1,000.00
Charles L. Hancock (part), taxes on Chelsea real estate,	33.32
Amount carried forward,	$10,999.06

Table No. XXIII, Sundry Funds for Special Purposes, cont'd.

PAYMENTS.

Amount brought forward,		$10,999.06
Henry S. Nourse (part). Annuity,	$1,000.00	
Legal and other expenses,	20.00	1,020.00
Professorship of Hygiene (part), annuity,		3,666.82
James Skillen Memorial, annuity,		300.00
George Smith Bequest. Annuities,		900.00
Alexander W. Thayer, annuity,		480.00
Charles Wilder, annuities,		1,896.00
Daniel Williams.		
Treasurer of Mashpee Indians,	$527.28	
" " Herring Pond Indians,	273.15	800.43
Sarah Winslow.		
Teacher at Tyngsborough, Mass.,	$110.94	
Minister " " "	110.94	
Commission on income, credited to University,	5.88	227.76
Woodland Hill.		
Taxes,	$1,074.84	
Legal expenses,	130.00	
Interest on advances,	127.18	1,332.02
		$21,622.09

Table No. XXIV.

CONSTRUCTION ACCOUNTS.

RECEIPTS.

Gifts for a new University Library Building.		
Interest on balance,	$1,609.99	
Gifts towards the addition to Gore Hall,	15,000.00	$16,609.99
George Smith Bequest (accumulating) (part, see p. 131),		14,076.72
Medical School Undertaking.		
Sale of property at the corner of Boylston and Exeter Streets,	$500,423.80	
Premiums for insurance on this property repaid,	724.12	
Interest on proceeds of sale,	16,192.89	
	$517,340.81	
Sales of land adjoining new buildings,	309,058.14	
Net income of real estate,	494.26	
John D. Rockefeller Gift. Interest on balance,	57,808.33	
Gift for Pathological Laboratory. Interest,	273.68	884,975.22
Gifts for Improvements and Additions to The Soldier's Field,		20,000.00
		$935,661.93

TABLE NO. XXIV, CONSTRUCTION ACCOUNTS, CONTINUED.

PAYMENTS.

Antitoxin Laboratory, construction.			
Building,		$403.95	
Interest on advances,		.94	$404.89
From gifts towards the addition to **Gore** Hall, construction,			14,681.62
Langdell Hall (for the Law Library), construction,			246,417.40
Medical School Undertaking.			
From Gifts for Pathological Laboratory,		$63.35	
Real Estate.			
Removing loam,	$124.66		
Legal services,	40.00		
Surveys and plans,	9.00		
Interest on advances,	14,606.81	14,780.47	
Construction.			
Buildings,	$150,826.20		
Interest on advances,	43,280.20	194,106.40	208,950.22
Gifts for Improvements and Additions to The Soldier's Field.			
Stadium. Interest on advances,			2,353.81
			$472,757.94

TABLE NO. XXV.

SUNDRY ACCOUNTS.

RECEIPTS.

Bursar's Sundry Accounts,		$493,373.50
Advances from General Investments to		
Antitoxin Laboratory,	$404.89	
Uriah A. Boyden Fund,	3,295.09	
Classical Publication Fund of the **Class of 1856**,	245.24	
Dante Prize,	50.00	
Price Greenleaf Income for Books,	97.04	
Sales Book Fund,	5.53	
German Department Library,	14.26	
Harvard Psychological Review,	514.46	
Medical School,	819.64	
Peabody Museum of American Archaeology and Ethnology,	656.43	6,102.58
Gains and Losses for General Investments. Gain on sales.		
$100,000 Schenectady 1st M. 4½'s of 1941,	$518.32	
50,000 American Tel. & Tel. Co. 5% Gold Coupon Notes of 1907, paid at par,	3,468.75	3,987.07
Gains from changes of Special Investments.		
Henry S. Nourse Fund.		
25 shares Brookside Mills,		118.75
Amount carried forward,		$503,581.90

TABLE No. XXV, SUNDRY ACCOUNTS, CONTINUED.

RECEIPTS.

Amount brought forward,		$503,581.90
Income Account.		
Balance remaining after dividing the net income among the Funds, as stated on page 5,		1,099.17
Transfer to		
Anonymous Gift for Observatory, from Advancement of Astronomical Science Fund (1902),		1,588.08
Transfers to the Medical School Undertaking, to meet the excess in costs over gifts and other credits.		
Collis P. Huntington Laboratory, from		
Interest on Gift of **John D. Rockefeller,**	$160,056.65	
Junius Spencer Morgan Memorial Halls, from		
Sale of property on Boylston and Exeter Streets,	279,825.78	
Henry L. Pierce (Residuary) Fund,	1,347.33	
Power House (total cost), from		
Henry L. Pierce (Residuary) Fund,	278,052.56	
David Sears Building, from		
Interest on Gift of **John D. Rockefeller,**	75,110.60	
Sale of property on Boylston and Exeter Streets,	30,990.07	
Animal House, mains, tunnels and sundries, from		
Henry L. Pierce (Residuary) Fund,	85,637.29	
Sale of property on Boylston and Exeter Streets,	65,629.30	
Real Estate, from		
Sale of property on Boylston and Exeter Streets,	106,176.66	1,082,826.24
Sundry balances,		2,796.64
		$1,591,892.03

PAYMENTS.

Bursar's Sundry Accounts,		$499,495.89
Advances from General Investments, repaid by		
Anonymous Gift for Observatory,	$1,588.08	
Book Fund of the **Class of 1881,**	20.25	
Edwin Conant Book Fund,	10.00	
Lloyd McKim Garrison Fund,	17.48	
R. M. Hodges Fund,	247.56	
Sever Book Fund,	68.60	
Botanic Department,	1,638.39	
Emerson Hall, cost in excess of gifts, paid from unrestricted principal,	3,368.81	
William Hayes Fogg Art Museum,	93.68	
Medical School Real Estate,	106.69	
" " Undertaking,	1,183,526.43	
Observatory,	4,441.96	
Gifts for Improvements and Additions to The Soldier's Field on account of the Stadium,	17,646.19	1,212,774.12
Amount carried forward,		$1,712,270.01

Table No. XXV, Sundry Accounts, continued.

PAYMENTS.

Amount brought forward,		$1,712,270.01
Gains and Losses for General Investments.		
Loss on sale.		
$150,000 Mortgage note on property on Boylston and Exeter Streets,		1,600.00
Loss from change of Special Investment.		
Daniel A. Buckley Fund.		
Deferred charge on sale of real estate in Cambridge,		5.00
To reimburse the Committee in charge of the **Shaler** Memorial gifts, for their expenses in that Committee,		760.23
Transfers from		
Advancement of Astronomical Science Fund (1902)		
To Anonymous Gift for Observatory,		1,588.08
Henry L. Pierce (Residuary) Fund (an unrestricted bequest),	$365,037.18	
Interest on Gift of **John D. Rockefeller,**	235,167.25	
Sale of property on Boylston and Exeter Streets,	482,621.81	
To Medical School Undertaking,		1,082,826.24
Sale of property on Boylston and Exeter Streets,		
To **Henry Francis Sears** Fund for Pathology,		35,000.00
		$2,834,049.56

BALANCED SUMMARY OF THE TABLES.

Table.		Receipts.	Payments.
I.	University,	$81,916.11	$143,165.48
II.	College,	1,319,893.76	917,224.83
III.	Library,	72,389.59	80,364.42
IV.	Divinity School,	40,897.43	39,510.71
V.	Law School,	146,203.24	100,627.30
VI.	Medical School,	422,067.77	201,280.97
VII.	Dental School,	25,826.70	19,138.46
VIII.	**Bussey** Institution,	20,420.16	18,515.57
IX.	**Arnold** Arboretum,	44,075.27	33,803.85
X.	Botanic Garden and Botanical Museum,	12,159.43	10,658.72
XI.	**Gray** Herbarium,	60,197.47	11,488.70
XII.	Observatory,	65,591.84	60,886.46
XIII.	Museum of Comparative Zoölogy,	36,779.33	39,993.69
XIV.	**Peabody** Museum of American Archaeology and Ethnology,	16,651.88	16,894.35
XV.	Semitic Museum,	10,678.53	7,193.29
XVI.	Germanic Museum,	8,108.74	1,234.92
XVII.	**William Hayes Fogg** Art Museum,	7,068.03	5,711.19
XVIII.	**Jefferson** Physical Laboratory,	9,984.84	8,598.00
XIX.	**Appleton** Chapel,	2,505.77	2,505.77
XX.	**Phillips Brooks** House,	1,719.78	1,987.53
XXI.	**Hemenway** Gymnasium,	2,516.38	2,516.38
XXII.	**Stillman** Infirmary,	23,514.05	18,683.08
XXIII.	Sundry Funds for Special Purposes,	26,431.41	21,622.09
XXIV.	Construction Accounts,	935,661.93	472,757.94
XXV.	Sundry Accounts,	1,591,892.03	2,834,049.56
		$4,985,151.47	$5,070,413.26

Total amount of payments,		$5,070,413.26
Total amount of receipts,	$4,985,151.47	
Less gifts for capital account,	548,423.99	4,436,727.48
Balance, which is the net decrease of Funds and balances, excluding gifts for capital, as is shown also on page 7,		$633,685.78

Certificate of the Committees of the Corporation and Overseers of Harvard College, for examining the Accounts of the Treasurer.

The committees appointed by the Corporation and Overseers of Harvard College to examine the accounts of the Treasurer for the year ending July 31, 1907, have, with the assistance of an expert chosen by them, examined and audited the Cash-book and Journal covering the period from August 1, 1906, to July 31, 1907, inclusive, and have seen that all the bonds, notes, mortgages, certificates of stock, and other evidences of property, which were on hand at the beginning of said year, or have been received by him during said year, are now in his possession, or are fully accounted for by entries made therein; they have also noticed all payments, both of principal and interest, indorsed on any of said bonds or notes, and have seen that the amounts so indorsed have been duly credited to the College.

They have in like manner satisfied themselves that all the entries for moneys expended by the Treasurer, or charged in his books to the College, are well vouched; such of them as are not supported by counter entries being proved by regular vouchers and receipts.

They have also seen that all the entries for said year are duly transferred to the Ledger, and that the accounts there are rightly cast, and the balances carried forward correctly to new accounts.

(Signed)

ARTHUR T. CABOT,	*Committee on the part of the Corporation.*
STEPHEN M. WELD, WILLIAM ENDICOTT, Jr. WILLIAM C. ENDICOTT, GORDON ABBOTT, GRAFTON St.L. ABBOTT, ALLAN FORBES, RICHARD C. STOREY, JOHN L. SALTONSTALL.	*Committee on the part of the Board of Overseers.*

Boston, January, 1908.

INDEX

Titles which appear in the table of Funds and Balances, beginning on page 62, are in full face type.

Figures in *italics* represent payments; in regular Roman type, receipts.

Two or more entries on a page are indicated by a small figure at the right of the page number: 20^3 indicates three entries of receipts on page 20.

Abbreviations are used as follows: —

A.,	Arnold Arboretum;	*M.*,	Medical School;
B.,	Book Funds;	*M.S.U.*,	Medical School Undertaking;
Be.,	Beneficiary and Loan Funds;	*O.*,	Observatory;
C.,	College;	*P.*,	Professorship Funds;
D.,	Divinity School;	*Pr.*,	Prize Funds;
F.,	Fellowship Funds;	*S.*,	Scholarship Funds;
L.,	Law School;	*U.*,	University.

Abbot (*S.*), 66, 85, *94*.
Abbot, J. W. P., 63, 84.
Advancement of Astronomical Science (1901), *43*, 75, 131, *131*.
Advancement of Astronomical Science (1902), *43*, 59, 75, 121, *121*, 131, *131*, 134, *135*.
Advances from General Investments, 133, *134*.
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